Exam Questions TA-002-P

HashiCorp Certified: Terraform Associate

https://www.2passeasy.com/dumps/TA-002-P/

NEW QUESTION 1
- (Exam Topic 1)
You write a new Terraform configuration and immediately run terraform apply in the CLI using the local backend.
Why will the apply fail?

A. Terraform needs you to format your code according to best practices first
B. Terraform needs to install the necessary plugins first
C. The Terraform CLI needs you to log into Terraform cloud first
D. Terraform requires you to manually run terraform plan first

Answer: B

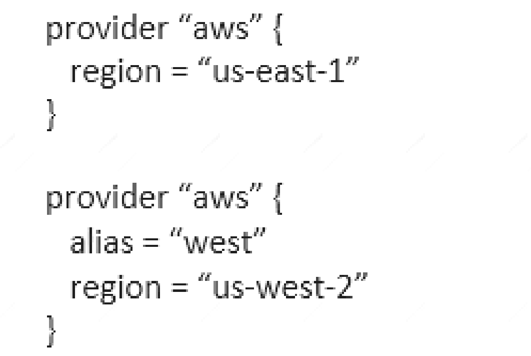
NEW QUESTION 2
- (Exam Topic 1)
terraform validate validates the syntax of Terraform files.

A. True
B. False

Answer: A

Explanation:
https://www.terraform.io/cli/commands/validate
The terraform validate command validates the syntax and arguments of the Terraform configuration files. Reference:
https://www.terraform.io/docs/cli/code/index.html

NEW QUESTION 3
- (Exam Topic 1)
You need to deploy resources into two different cloud regions in the same Terraform configuration. To do that, you declare multiple provider configurations as follows:



```
provider “aws” {
  region = “us-east-1”
}

provider “aws” {
  alias = “west”
  region = “us-west-2”
}
```

What meta-argument do you need to configure in a resource block to deploy the resource to the “us-west-2” AWS region?

A. alias = west
B. provider = west
C. provider = aws.west
D. alias = aws.west

Answer: C

Explanation:

https://www.terraform.io/language/providers/configuration

NEW QUESTION 4
- (Exam Topic 1)
You have used Terraform to create an ephemeral development environment in the cloud and are now ready to destroy all the infrastructure described by your Terraform configuration. To be safe, you would like to first see all the infrastructure that will be deleted by Terraform.
Which command should you use to show all of the resources that will be deleted? (Choose two.)

A. Run terraform plan -destroy.
B. This is not possibl
C. You can only show resources that will be created.
D. Run terraform state rm *.
E. Run terraform destroy and it will first output all the resources that will be deleted before prompting for approval.

Answer: AD

Explanation:

Reference: https://www.terraform.io/docs/cli/commands/state/rm.html

NEW QUESTION 5
- (Exam Topic 1)
Which argument(s) is (are) required when declaring a Terraform variable?

A. type
B. default
C. description
D. All of the above
E. None of the above

Answer: B

Explanation:
The variable declaration can also include a default argument.
Reference: https://www.terraform.io/docs/language/values/variables.html

NEW QUESTION 6
- (Exam Topic 1)
Why would you use the terraform taint command?

A. When you want to force Terraform to destroy a resource on the next apply
B. When you want to force Terraform to destroy and recreate a resource on the next apply
C. When you want Terraform to ignore a resource on the next apply
D. When you want Terraform to destroy all the infrastructure in your workspace

Answer: B

Explanation:
The terraform taint command manually marks a Terraform-managed resource as tainted, forcing it to be destroyed and recreated on the next apply.
Reference: https://www.terraform.io/docs/cli/commands/taint.html

NEW QUESTION 7
- (Exam Topic 1)
Terraform providers are always installed from the Internet.

A. True
B. False

Answer: B

Explanation:
Terraform configurations must declare which providers they require, so that Terraform can install and use them.
Reference: https://www.terraform.io/docs/language/providers/configuration.html

NEW QUESTION 8
- (Exam Topic 1)
Which task does terraform init not perform?

A. Sources all providers present in the configuration and ensures they are downloaded and available locally
B. Connects to the backend
C. Sources any modules and copies the configuration locally
D. Validates all required variables are present

Answer: D

Explanation:
Reference: https://www.terraform.io/docs/cli/commands/init.html

NEW QUESTION 9
- (Exam Topic 1)
The terraform.tfstate file always matches your currently built infrastructure.

A. True
B. False

Answer: B

Explanation:
Reference: https://www.terraform.io/docs/language/state/index.html

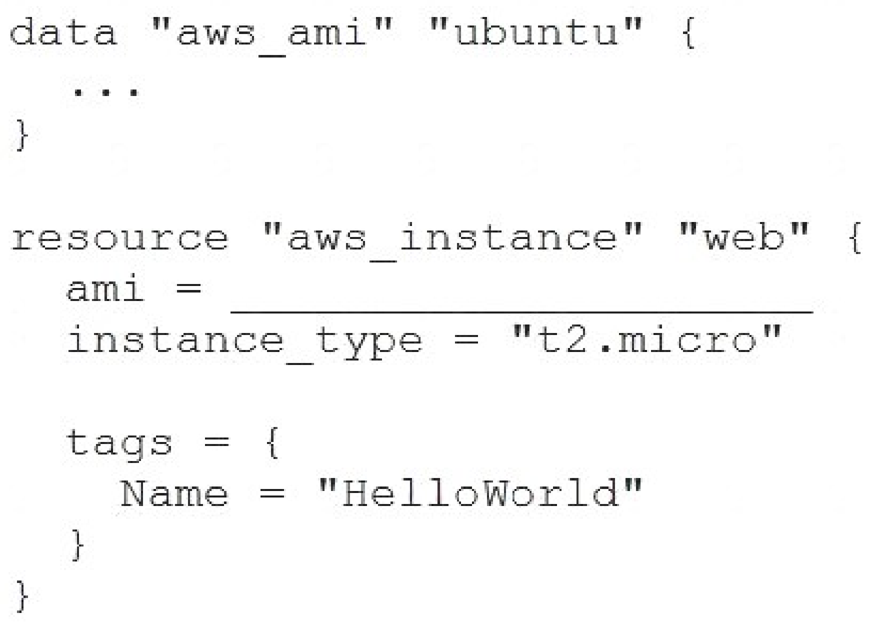
NEW QUESTION 10
- (Exam Topic 1)
Which two steps are required to provision new infrastructure in the Terraform workflow? (Choose two.)

A. Destroy
B. Apply
C. Import
D. Init
E. Validate

Answer: BD

Explanation:
Reference: https://www.terraform.io/guides/core-workflow.html

NEW QUESTION 10
- (Exam Topic 1)
Examine the following Terraform configuration, which uses the data source for an AWS AMI. What value should you enter for the ami argument in the AWS instance resource?



```
data "aws_ami" "ubuntu" {
  ...
}

resource "aws_instance" "web" {
  ami = _____________________
  instance_type = "t2.micro"

  tags = {
    Name = "HelloWorld"
  }
}
```

A. aws_ami.ubuntu
B. data.aws_ami.ubuntu
C. data.aws_ami.ubuntu.id
D. aws_ami.ubuntu.id

Answer: C

Explanation:
resource "aws_instance" "web" { ami= data.aws_ami.ubuntu.id
Reference: https://registry.terraform.io/providers/hashicorp/aws/latest/docs/resources/instance

NEW QUESTION 11
- (Exam Topic 1)
What is one disadvantage of using dynamic blocks in Terraform?

A. They cannot be used to loop through a list of values
B. Dynamic blocks can construct repeatable nested blocks
C. They make configuration harder to read and understand
D. Terraform will run more slowly

Answer: C

Explanation:
"Overuse of dynamic blocks can make configuration hard to read and maintain, so we recommend using them only when you need to hide details in order to build a clean user interface for a re-usable module. Always write nested blocks out literally where possible."
Reference: https://github.com/hashicorp/terraform/issues/19291

NEW QUESTION 12
- (Exam Topic 1)
terraform init initializes a sample main.tf file in the current directory.

A. True
B. False

Answer: B

Explanation:
Reference: https://www.terraform.io/docs/cli/commands/init.html

NEW QUESTION 14
- (Exam Topic 1)
You’re building a CI/CD (continuous integration/ continuous delivery) pipeline and need to inject sensitive variables into your Terraform run.
How can you do this safely?

A. Pass variables to Terraform with a –var flag
B. Copy the sensitive variables into your Terraform code
C. Store the sensitive variables in a secure_vars.tf file
D. Store the sensitive variables as plain text in a source code repository

Answer: A

Explanation:
https://blog.gruntwork.io/a-comprehensive-guide-to-managing-secrets-in-your-terraform-code-1d586955ace1

NEW QUESTION 16
- (Exam Topic 1)
Which statement describes a goal of infrastructure as code?

A. An abstraction from vendor specific APIs
B. Write once, run anywhere
C. A pipeline process to test and deliver software
D. The programmatic configuration of resources

Answer: D

Explanation:
The purpose of infrastructure as code is to enable developers or operations teams to automatically manage, monitor and provision resources, rather than manually configure discrete hardware devices and operating systems. Infrastructure as code is sometimes referred to as programmable or software-defined infrastructure.

NEW QUESTION 19
- (Exam Topic 1)
Which of these options is the most secure place to store secrets foe connecting to a Terraform remote backend?

A. Defined in Environment variables
B. Inside the backend block within the Terraform configuration
C. Defined in a connection configuration outside of Terraform
D. None of above

Answer: A

Explanation:
https://www.terraform.io/language/settings/backends/configuration#credentials-and-sensitive-data Warning: We recommend using environment variables to supply credentials and other sensitive data. If you
use -backend-config or hardcode these values directly in your configuration, Terraform will include these values in both the .terraform subdirectory and in plan files. This can leak sensitive credentials.

NEW QUESTION 23
- (Exam Topic 1)
You have declared a variable called var.list which is a list of objects that all have an attribute id. Which options will produce a list of the IDs? (Choose two.)

A. { for o in var.list : o => o.id }
B. var.list[*].id
C. [var.list[*].id]
D. [for o in var.list : o.id]

Answer: BD

Explanation:
https://www.terraform.io/language/expressions/splat
A splat expression provides a more concise way to express a common operation that could otherwise be performed with a for expression.

NEW QUESTION 24
- (Exam Topic 1)
Where does the Terraform local backend store its state?

A. In the /tmp directory
B. In the terraform.tfvars file
C. In the terraform.tfstate file
D. In the user's .terraformrc file

Answer: C

Explanation:
https://www.terraform.io/language/state
The local backend stores state on the local filesystem, locks that state using system APIs, and performs operations locally.
Reference: https://www.terraform.io/docs/language/settings/backends/local.html

NEW QUESTION 29
- (Exam Topic 1)
Which of the following is not a key principle of infrastructure as code?

A. Versioned infrastructure
B. Golden images
C. Idempotence
D. Self-describing infrastructure

Answer: B

Explanation:
Reference: https://docs.microsoft.com/en-us/azure/devops/learn/what-is-infrastructure-as-code#:~:text=Idempotence%20is%20a%20principle%20of,of%20the%20environment's%20starting%20state.

NEW QUESTION 31
- (Exam Topic 1)
You just scaled your VM infrastructure and realized you set the count variable to the wrong value. You correct the value and save your change. What do you do next to make your infrastructure match your configuration?

A. Run an apply and confirm the planned changes
B. Inspect your Terraform state because you want to change it
C. Reinitialize because your configuration has changed
D. Inspect all Terraform outputs to make sure they are correct

Answer: A

NEW QUESTION 36
- (Exam Topic 1)
Which of the following is the correct way to pass the value in the variable num_servers into a module with the input servers?

A. servers = num_servers
B. servers = variable.num_servers
C. servers = var(num_servers)
D. servers = var.num_servers

Answer: D

Explanation:
"Within the module that declared a variable, its value can be accessed from within expressions as var.<NAME>, where <NAME> matches the label given in the declaration block:
Note: Input variables are created by a variable block, but you reference them as attributes on an object named var."
https://www.terraform.io/language/values/variables#using-input-variable-values

NEW QUESTION 41
- (Exam Topic 1)
What type of block is used to construct a collection of nested configuration blocks?

A. for_each
B. repeated
C. nesting
D. dynamic

Answer: D

Explanation:
https://www.terraform.io/language/expressions/dynamic-blocks

NEW QUESTION 43
- (Exam Topic 1)
FILL BLANK
Which flag would you add to terraform plan to save the execution plan to a file?
Type your answer in the field provided. The text field is not case-sensitive and all variations of the correct answer are accepted.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
"You can use the optional -out=FILE option to save the generated plan to a file on disk, which you can later execute by passing the file to terraform apply as an extra argument. This two-step workflow is primarily intended for when running Terraform in automation. If you run terraform plan without the -out=FILE option then it will create a speculative plan, which is a description of the effect of the plan but without any intent to actually apply it." https://www.terraform.io/cli/commands/plan

NEW QUESTION 47
- (Exam Topic 1)
You have never used Terraform before and would like to test it out using a shared team account for a cloud provider. The shared team account already contains 15 virtual machines (VM). You develop a Terraform configuration containing one VM, perform terraform apply, and see that your VM was created successfully. What should you do to delete the newly-created VM with Terraform?

A. The Terraform state file contains all 16 VMs in the team accoun
B. Execute terraform destroy and select the newly-created VM.
C. The Terraform state file only contains the one new V
D. Execute terraform destroy.
E. Delete the Terraform state file and execute Terraform apply.
F. Delete the VM using the cloud provider console and terraform apply to apply the changes to the Terraform state file.

Answer: B

Explanation:
You develop a Terraform configuration containing one VM, perform terraform apply, and see that your VM was created successfully. read the question carefully "Terraform configuration containing one VM, perform terraform apply" so only one VM is in state file.

NEW QUESTION 48
- (Exam Topic 1)
If a module declares a variable with a default, that variable must also be defined within the module.

A. True
B. False

Answer: B

NEW QUESTION 49
- (Exam Topic 1)
When does terraform apply reflect changes in the cloud environment?

A. Immediately
B. However long it takes the resource provider to fulfill the request
C. After updating the state file
D. Based on the value provided to the -refresh command line argument
E. None of the above

Answer: B

NEW QUESTION 50
- (Exam Topic 1)
Terraform variables and outputs that set the "description" argument will store that description in the state file.

A. True
B. False

Answer: B

Explanation:
Reference: https://www.terraform.io/docs/language/values/outputs.html

NEW QUESTION 51
- (Exam Topic 1)
What is not processed when running a terraform refresh?

A. State file
B. Configuration file
C. Credentials
D. Cloud provider

Answer: B

Explanation:
"The terraform refresh command reads the current settings from all managed remote objects and updates the Terraform state to match."

NEW QUESTION 54
- (Exam Topic 1)
A Terraform local value can reference other Terraform local values.

A. True
B. False

Answer: A

Explanation:
"The expressions in local values are not limited to literal constants; they can also reference other values in the module in order to transform or combine them, including variables, resource attributes, or other local values:" https://www.terraform.io/language/values/locals#declaring-a-local-value

NEW QUESTION 58
- (Exam Topic 1)
A Terraform provisioner must be nested inside a resource configuration block.

A. True
B. False

Answer: A

Explanation:
Most provisioners require access to the remote resource via SSH or WinRM, and expect a nested connection block with details about how to connect.
Reference: https://www.terraform.io/docs/language/resources/provisioners/connection.html

NEW QUESTION 63
- (Exam Topic 1)
In Terraform 0.13 and above, outside of the required_providers block, Terraform configurations always refer to providers by their local names.

A. True
B. False

Answer: A

Explanation:
Outside of the required_providers block, Terraform configurations always refer to providers by their local names.
Reference: https://www.terraform.io/docs/language/providers/requirements.html https://www.terraform.io/language/providers/requirements#local-names

NEW QUESTION 66
- (Exam Topic 1)
When using Terraform to deploy resources into Azure, which scenarios are true regarding state files? (Choose two.)

A. When a change is made to the resources via the Azure Cloud Console, the changes are recorded in a new state file
B. When a change is made to the resources via the Azure Cloud Console, Terraform will update the state file to reflect them during the next plan or apply
C. When a change is made to the resources via the Azure Cloud Console, the current state file will not be updated
D. When a change is made to the resources via the Azure Cloud Console, the changes are recorded in the current state file

Answer: BC

NEW QUESTION 71
- (Exam Topic 1)
Which of the following is not a valid Terraform collection type?

A. list
B. map
C. tree
D. set

Answer: C

Explanation:
https://www.terraform.io/language/expressions/type-constraints#collection-types

NEW QUESTION 76
- (Exam Topic 1)
You have recently started a new job at a retailer as an engineer. As part of this new role, you have been tasked with evaluating multiple outages that occurred during peak shopping time during the holiday season. Your investigation found that the team is manually deploying new compute instances and configuring each compute instance manually. This has led to inconsistent configuration between each compute instance.
How would you solve this using infrastructure as code?

A. Implement a ticketing workflow that makes engineers submit a ticket before manually provisioning and configuring a resource
B. Implement a checklist that engineers can follow when configuring compute instances
C. Replace the compute instance type with a larger version to reduce the number of required deployments
D. Implement a provisioning pipeline that deploys infrastructure configurations committed to your version control system following code reviews

Answer: D

NEW QUESTION 79
- (Exam Topic 1)
A Terraform provider is not responsible for:

A. Understanding API interactions with some service
B. Provisioning infrastructure in multiple clouds
C. Exposing resources and data sources based on an API
D. Managing actions to take based on resource differences

Answer: B

Explanation:
https://www.terraform.io/language/providers

NEW QUESTION 80
- (Exam Topic 1)
What is terraform refresh intended to detect?

A. Terraform configuration code changes
B. Empty state files
C. State file drift
D. Corrupt state files

Answer: C

Explanation:
"The terraform refresh command reads the current settings from all managed remote objects and updates the Terraform state to match. Warning: This command is deprecated, because its default behavior is unsafe if you have misconfigured credentials for any of your providers. See below for more information and recommended alternatives." https://www.terraform.io/cli/commands/refresh

NEW QUESTION 83
- (Exam Topic 1)
Which of the following is not true of Terraform providers?

A. Providers can be written by individuals
B. Providers can be maintained by a community of users
C. Some providers are maintained by HashiCorp
D. Major cloud vendors and non-cloud vendors can write, maintain, or collaborate on Terraform providers
E. None of the above

Answer: E

Explanation:
https://registry.terraform.io/providers/hashicorp/google/latest - This provider is collaboratively maintained by the Google Terraform Team at Google and the Terraform team at HashiCorp
https://www.terraform.io/language/providers

NEW QUESTION 87
- (Exam Topic 1)
You run a local-exec provisioner in a null resource called null_resource.run_script and realize that you need to rerun the script.
Which of the following commands would you use first?

A. terraform taint null_resource.run_script
B. terraform apply -target=null_resource.run_script
C. terraform validate null_resource.run_script
D. terraform plan -target=null_resource.run_script

Answer: A

Explanation:
https://www.terraform.io/cli/commands/taint

NEW QUESTION 90
- (Exam Topic 1)
If you manually destroy infrastructure, what is the best practice reflecting this change in Terraform?

A. Run terraform refresh
B. It will happen automatically
C. Manually update the state fire
D. Run terraform import

Answer: A

Explanation:
https://www.terraform.io/cli/commands/refresh#:~:text=The%20terraform%20refresh%20command%20reads%

NEW QUESTION 95
- (Exam Topic 1)
Your DevOps team is currently using the local backend for your Terraform configuration. You would like to move to a remote backend to begin storing the state file in a central location. Which of the following backends would not work?

A. Amazon S3
B. Artifactory
C. Git
D. Terraform Cloud

Answer: C

Explanation:
https://www.terraform.io/cdktf/concepts/remote-backends https://docs.gitlab.com/ee/user/infrastructure/iac/terraform_state.html

NEW QUESTION 100
- (Exam Topic 1)
How is the Terraform remote backend different than other state backends such as S3, Consul, etc.?

A. It can execute Terraform runs on dedicated infrastructure on premises or in Terraform Cloud
B. It doesn't show the output of a terraform apply locally
C. It is only available to paying customers
D. All of the above

Answer: A

Explanation:
Backends define where Terraform's state snapshots are stored. A given Terraform configuration can either specify a backend, integrate with Terraform Cloud, or do neither and default to storing state locally.
If you and your team are using Terraform to manage meaningful infrastructure, we recommend using the remote backend with Terraform Cloud or Terraform Enterprise.
Reference: https://www.terraform.io/docs/language/settings/backends/index.html

NEW QUESTION 103
- (Exam Topic 1)
How is terraform import run?

A. As a part of terraform init
B. As a part of terraform plan
C. As a part of terraform refresh
D. By an explicit call
E. All of the above

Answer: D

Explanation:
"The current implementation of Terraform import can only import resources into the state. It does not generate configuration. A future version of Terraform will also generate configuration. Because of this, prior to running terraform import it is necessary to write manually a resource configuration block for the resource, to which the imported object will be mapped. While this may seem tedious, it still gives Terraform users an avenue for importing existing resources."
https://www.terraform.io/cli/import/usage

NEW QUESTION 104
- (Exam Topic 1)
You have multiple team members collaborating on infrastructure as code (IaC) using Terraform, and want to apply formatting standards for readability.
How can you format Terraform HCL (HashiCorp Configuration Language) code according to standard Terraform style convention?

A. Run the terraform fmt command during the code linting phase of your CI/CD process
B. Designate one person in each team to review and format everyone's code
C. Manually apply two spaces indentation and align equal sign "=" characters in every Terraform file (*.tf)
D. Write a shell script to transform Terraform files using tools such as AWK, Python, and sed

Answer: A

Explanation:
https://www.terraform.io/cli/commands/fmt

NEW QUESTION 109
- (Exam Topic 1)
Which backend does the Terraform CLI use by default?

A. Terraform Cloud
B. Consul
C. Remote
D. Local

Answer: D

Explanation:
"By default, Terraform implicitly uses a backend called local to store state as a local file on disk. Every other
backend stores state in a remote service of some kind, which allows multiple people to access it. Accessing state in a remote service generally requires some kind of access credentials, since state data contains extremely sensitive information." https://www.terraform.io/language/settings/backends

NEW QUESTION 110
- (Exam Topic 2)
Which one of the following command will rewrite Terraform configuration files to a canonical format and style.

A. terraform graph -h
B. terraform init
C. terraform graph
D. terraform fmt

Answer: D

Explanation:
The terraform fmt command is used to rewrite Terraform configuration files to a canonical format and style. This command applies a subset of the Terrra Terraform language style conventions, along with other minor adjustments for readability.

NEW QUESTION 114
- (Exam Topic 2)
When TF_LOG_PATH is set, TF_LOG must be set in order for any logging to be enabled.

A. False
B. True

Answer: B

Explanation:
TF_LOG_PATH specifies where the log should persist its output to. Note that even when TF_LOG_PATH is set, TF_LOG must be set in order for any logging to be enabled.
For example, to always write the log to the directory you're currently running terraform from: export TF_LOG_PATH=./terraform.log
export TF_LOG=TRACE

NEW QUESTION 117
- (Exam Topic 2)
Which of the below are paid features of Terraform Cloud?

A. Full API Coverage
B. Secure variable Storage
C. Roles/ Team management
D. Cost Estimation
E. Private Module Registry
F. Sentinel policies

Answer: CDF

Explanation:
https://www.hashicorp.com/products/terraform/pricing/

NEW QUESTION 120
- (Exam Topic 2)
While using generic git repository as a module source, which of the below options allows terraform to select a specific version or tag instead of selecting the HEAD.

A. Append ref argument asmodule "vpc" { source = "git::https://example.com/vpc.git?ref=v1.2.0"}
B. Append version argument asmodule "vpc" { source = "git::https://example.com/vpc.git?version=v1.2.0"}
C. Append ref argument asmodule "vpc" { source = "git::https://example.com/vpc.git#ref=v1.2.0"}
D. By default, Terraform will clone and use the default branch (referenced by HEAD) in the selected repository and you can not override this.

Answer: A

Explanation:
By default, Terraform will clone and use the default branch (referenced by HEAD) in the selected repository. You can override this using the ref argument:
module "vpc" {
source = "git::https://example.com/vpc.git?ref=v1.2.0"
}
The value of the ref argument can be any reference that would be accepted by the git checkout command, including branch and tag names.
https://www.terraform.io/docs/modules/sources.html

NEW QUESTION 123
- (Exam Topic 2)
Which of the following represents a feature of Terraform Cloud that is NOT free to customers?

A. Roles and Team Management
B. WorkSpace Management
C. Private Module Registry
D. VCS Integration

Answer: A

Explanation:
Role Based Access Controls (RBAC) for controlling permissions for who has access to what configurations within an organization and it is not free to customers.
https://www.hashicorp.com/products/terraform/pricing/

NEW QUESTION 124
- (Exam Topic 2)
Terraform has detailed logs which can be enabled by setting the _____ environmental variable.

A. TF_TRACE
B. TF_DEBUG
C. TF_LOG
D. TF_INFO

Answer: C

Explanation:
Terraform has detailed logs that can be enabled by setting the TF_LOG environment variable to any value. This will cause detailed logs to appear on stderr.
You can set TF_LOG to one of the log levels TRACE, DEBUG, INFO, WARN or ERROR to change the verbosity of the logs. TRACE is the most verbose and it is the default if TF_LOG is set to something other than a log level name. https://www.terraform.io/docs/internals/debugging.html

NEW QUESTION 127
- (Exam Topic 2)
John wants to use two different regions to deploy two different EC2 instances. He has specified two provider blocks in his providers.tf file.

provider "aws" { region = "us-east-1" } provider "aws" { region = "us-west-2" }
When he run terraform plan he encountered an error. How to fix this?

A. Use another provider version
B. Use alias for region = "us-west-2"
C. Use default keyword with region = "us-east-1"
D. It can not be fixed

Answer: B

NEW QUESTION 130
- (Exam Topic 2)
You want terraform plan and apply to be executed in Terraform Cloud's run environment but the output is to be streamed locally. Which one of the below you will choose?

A. Local Backends
B. This can be done using any of the local or remote backends
C. Remote Backends
D. Terraform Backends

Answer: C

Explanation:
The remote backend stores Terraform state and may be used to run operations in Terraform Cloud. When using full remote operations, operations like terraform plan or terraform apply can be executed in
Terraform Cloud's run environment, with log output streaming to the local terminal.
Remote plans and applies use variable values from the associated Terraform Cloud workspace. https://www.terraform.io/docs/backends/types/remote.html

NEW QUESTION 134
- (Exam Topic 2)
Which one of the following will run echo 0 and echo 1 on a newly created host?

A. provisioner "local-exec" { command = "echo 0" command = "echo 1"}
B. provisioner "remote-exec" { inline = [echo 0,echo 1]}
C. provisioner "remote-exec" {command = "${echo 0}" command = "${echo 1}"}
D. provisioner "remote-exec" { inline = ["echo 0","echo 1"]}

Answer: D

Explanation:
remote-exec Provisioner Example usage

```
resource "aws_instance" "web" {
# ...
provisioner "remote-exec" { inline = [
"puppet apply",
"consul join ${aws_instance.web.private_ip}",
]
}
}
```

NEW QUESTION 137
- (Exam Topic 2)
Which of the following clouds does not have a provider maintained HashiCorp?

A. IBM Cloud
B. DigitalOcean
C. OpenStack
D. AWS

Answer: A

Explanation:
IBM Cloud does not have a provider maintained by HashiCorp, although IBM Cloud does maintain their own Terraform provider.
https://www.terraform.io/docs/providers/index.html

NEW QUESTION 139
- (Exam Topic 2)
You have created 2 workspaces PROD and RQA. You have switched to RQA and provisioned RQA infrastructure from this workspace. Where is your state file stored?

A. terraform.tfstate.d
B. terraform.d
C. terraform.tfstate.RQA
D. terraform.tfstate

Answer: A

NEW QUESTION 143

- (Exam Topic 2)
lookup retrieves the value of a single element from which of the below data type?

A. map
B. set
C. string
D. list

Answer: A

Explanation:
https://www.terraform.io/docs/configuration/functions/lookup.html

NEW QUESTION 146
- (Exam Topic 2)
What is the default backend for Terraform?

A. consul
B. gcs
C. local
D. etcd

Answer: C

Explanation:
By default, Terraform uses the "local" backend, which is the normal behavior of Terraform you're used to. https://www.terraform.io/docs/backends/index.html

NEW QUESTION 151
- (Exam Topic 2)
The current implementation of Terraform import can only import resources into the state. It does not generate configuration.

A. False
B. True

Answer: B

Explanation:
The current implementation of Terraform import can only import resources into the state. It does not generate configuration. A future version of Terraform will also generate configuration.
Because of this, prior to running terraform import it is necessary to write manually a resource configuration block for the resource, to which the imported object will be mapped.
While this may seem tedious, it still gives Terraform users an avenue for importing existing resources. https://www.terraform.io/docs/import/index.html#currently-state-only

NEW QUESTION 156
- (Exam Topic 2)
Terraform import command can import resources into modules as well directly into the root of your state.

A. True
B. False

Answer: A

Explanation:
Import will find the existing resource from ID and import it into your Terraform state at the given ADDRESS. ADDRESS must be a valid resource address. Because any resource address is valid, the import command can import resources into modules as well directly into the root of your state.
Terraform is able to import existing infrastructure. This allows us take resources we've created by some other means (i.e. via console) and bring it under Terraform management.
This is a great way to slowly transition infrastructure to Terraform.
The terraform import command is used to import existing infrastructure.
To import a resource, first write a resource block for it in our configuration, establishing the name by which it will be known to Terraform. For example:

```
resource "aws_instance" "import_example" {
# ...instance configuration...
}
```

Now terraform import can be run to attach an existing instance to this resource configuration:

```
$ terraform import aws_instance.import_example i-03efafa258104165f aws_instance.import_example: Importing from ID "i-03efafa258104165f"...
aws_instance.import_example: Import complete!
Imported aws_instance (ID: i-03efafa258104165f) aws_instance.import_example: Refreshing state... (ID: i-03efafa258104165f) Import successful!
The resources that were imported are shown above. These resources are now in
your Terraform state and will henceforth be managed by Terraform.
```

This command locates the AWS instance with ID i-03efafa258104165f (which has been created outside Terraform) and attaches its existing settings, as described by the EC2 API, to the name aws_instance.import_example in the Terraform state.
As a result of the above command, the resource is recorded in the state file. We can now run terraform plan to see how the configuration compares to the imported resource, and make any adjustments to the configuration to align with the current (or desired) state of the imported object.
https://www.terraform.io/docs/commands/import.html

NEW QUESTION 160
- (Exam Topic 2)

You have created a custom variable definition file testing.tfvars. How will you use it for provisioning infrastructure?

A. terraform apply -var-state-file ="testing.tfvars"
B. terraform plan -var-file="testing.tfvar"
C. terraform apply -var-file="testing.tfvars"
D. terraform apply var-file="testing.tfvars"

Answer: C

Explanation:
https://www.terraform.io/docs/configuration/variables.html

NEW QUESTION 164
- (Exam Topic 2)
terraform refresh will update the state file?

A. True
B. False

Answer: A

Explanation:
The terraform refresh command is used to reconcile the state Terraform knows about (via its state file) with the real-world infrastructure. This can be used to detect any drift from the last-known state, and to update the state file.
This does not modify infrastructure, but does modify the state file. If the state is changed, this may cause changes to occur during the next plan or apply.

NEW QUESTION 165
- (Exam Topic 2)
Terraform works well in Windows but a Windows server is required.

A. False
B. True

Answer: A

Explanation:
You may see this QUESTION NO: in actual exam. Please remember : Terraform does not require GO language to be installed as a prerequisite and it does not require a Windows Server as well.

NEW QUESTION 170
- (Exam Topic 2)
You have declared a variable name my_var in terraform configuration without a value associated with it. variable my_var {}
After running terraform plan it will show an error as variable is not defined.

A. True
B. False

Answer: B

Explanation:
Input variables are usually defined by stating a name, type and a default value. However, the type and default values are not strictly necessary. Terraform can deduct the type of the variable from the default or input value.
Variables can be predetermined in a file or included in the command-line options. As such, the simplest variable is just a name while the type and value are selected based on the input.
variable "variable_name" {}
terraform apply -var variable_name="value"
The input variables, like the one above, use a couple of different types: strings, lists, maps, and boolean. Here are some examples of how each type are defined and used.
String
Strings mark a single value per structure and are commonly used to simplify and make complicated values more user-friendly. Below is an example of a string variable definition.
variable "template" { type = string
default = "01000000-0000-4000-8000-000030080200"
}
A string variable can then be used in resource plans. Surrounded by double quotes, string variables are a simple substitution such as the example underneath.
storage = var.template List
Another type of Terraform variables lists. They work much like a numbered catalogue of values. Each value can be called by their corresponding index in the list. Here is an example of a list variable definition.
variable "users" { type = list
default = ["root", "user1", "user2"]
}
Lists can be used in the resource plans similarly to strings, but you'll also need to denote the index of the value you are looking for.
username = var.users[0] Map
Maps are a collection of string keys and string values. These can be useful for selecting values based on predefined parameters such as the server configuration by the monthly price.
variable "plans" { type = map default = {
"5USD" = "1xCPU-1GB" "10USD" = "1xCPU-2GB" "20USD" = "2xCPU-4GB"
}
}
You can access the right value by using the matching key. For example, the variable below would set the plan to "1xCPU-1GB".

plan = var.plans["5USD"]
The values matching to their keys can also be used to look up information in other maps. For example, underneath is a shortlist of plans and their corresponding storage sizes.
variable "storage_sizes" { type = map
default = {
"1xCPU-1GB" = "25"
"1xCPU-2GB" = "50"
"2xCPU-4GB" = "80"
}
}
These can then be used to find the right storage size based on the monthly price as defined in the previous example.
size = lookup(var.storage_sizes, var.plans["5USD"])
Boolean
The last of the available variable type is boolean. They give the option to employ simple true or false values. For example, you might wish to have a variable that decides when to generate the root user password on a new deployment.
variable "set_password" { default = false
}
The above example boolean can be used similarly to a string variable by simply marking down the correct variable.
create_password = var.set_password
By default, the value is set to false in this example. However, you can overwrite the variable at deployment by assigning a different value in a command-line variable.
terraform apply -var set_password="true"

NEW QUESTION 171
- (Exam Topic 2)
What allows you to conveniently switch between multiple instances of a single configuration within its single backend?

A. Local backends
B. Providers
C. Remote backends
D. Workspaces

Answer: D

Explanation:
Named workspaces allow conveniently switching between multiple instances of a single configuration within its single backend. ... A common use for multiple workspaces is to create a parallel, distinct copy of a set of infrastructure in order to test a set of changes before modifying the main production infrastructure. Workspaces, allowing multiple states to be associated with a single configuration. The configuration still has only one backend, but multiple distinct instances of that configuration to be deployed without configuring a new backend or changing authentication credentials.
https://www.terraform.io/docs/state/workspaces.html

NEW QUESTION 172
- (Exam Topic 2)
By default, a defined provisioner is a creation-time provisioner.

A. True
B. False

Answer: A

Explanation:
https://www.terraform.io/docs/provisioners/index.html

NEW QUESTION 173
- (Exam Topic 2)
How does Terraform handle working with so many providers?

A. Terraform ships with all of the plugins embedded in the Terraform binary.
B. Terraform uses a plugin architecture for providers and only installs the provider plugins required by your configuration in the configuration's working directory.
C. Terraform uses a plugin architecture for providers and only installs the provider plugins required by your configuration in a shared, system-wide plugins directory.
D. Terraform allows you to select the providers you want to support during the Terraform installation process.

Answer: B

Explanation:
Terraform is built on a plugin-based architecture. All providers and provisioners that are used in Terraform configurations are plugins, even the core types such as AWS and Heroku. Users of Terraform are able to write new plugins in order to support new functionality in Terraform.

NEW QUESTION 175
- (Exam Topic 2)
Refer to the below code where developer is outputting the value of the database password but has used sensitive parameter to hide the output value in the CLI.
output "db_password" { value = aws_db_instance.db.password description = "The password for logging in to the database." sensitive = true}
Since sensitive is set to true, the value associated with db password will not be present in state file as plain-text?

A. False
B. True

Answer: A

Explanation:
Sensitive output values are still recorded in the state, and so will be visible to anyone who is able to access the state data.

NEW QUESTION 176
- (Exam Topic 2)
When using remote state, state is only ever held in memory when used by Terraform.

A. False
B. True

Answer: B

NEW QUESTION 177
- (Exam Topic 2)
Which of the following best describes a Terraform provider?

A. A plugin that Terraform uses to translate the API interactions with the service or provider.
B. Serves as a parameter for a Terraform module that allows a module to be customized.
C. Describes an infrastructure object, such as a virtual network, compute instance, or other components.
D. A container for multiple resources that are used together.

Answer: A

Explanation:
A provider is responsible for understanding API interactions and exposing resources. Providers generally are an IaaS (e.g. Alibaba Cloud, AWS, GCP, Microsoft Azure, OpenStack), PaaS (e.g. Heroku), or SaaS services (e.g.Terraform Cloud, DNSimple, Cloudflare).
https://www.terraform.io/docs/providers/index.html

NEW QUESTION 182
- (Exam Topic 2)
Which of the below configuration file formats are supported by Terraform? (Select TWO)

A. Node
B. JSON
C. Go
D. YAML
E. HCL

Answer: BE

Explanation:
Terraform supports both HashiCorp Configuration Language (HCL) and JSON formats for configurations. https://www.terraform.io/docs/configuration/

NEW QUESTION 187
- (Exam Topic 2)
Which of the following type of variable allows multiple values of several distinct types to be grouped together as a single value?

A. Map
B. Object
C. Tuple
D. List

Answer: BC

Explanation:
Structural type of variable allows multiple values of several distinct types to be grouped together as a single value. They require a schema as an argument, to specify which types are allowed for which elements.
https://www.terraform.io/docs/configuration/types.html

NEW QUESTION 191
- (Exam Topic 2)
Which of the following command can be used to view the specified version constraints for all providers used in the current configuration.

A. terraform providers
B. terraform state show
C. terraform provider
D. terraform plan

Answer: A

Explanation:
Use the terraform providers command to view the specified version constraints for all providers used in the current configuration.
https://www.terraform.io/docs/configuration/providers.html

NEW QUESTION 193
- (Exam Topic 2)

What is the command you can use to set an environment variable named "var1"of type String?

A. export TF_VAR_VAR1
B. set TF_VAR_var1
C. variable "var1" { type = "string"}
D. export TF_VAR_var1

Answer: D

Explanation:
The environment variable must be in the format TF_VAR_name, so for the QUESTION NO: TF_VAR_var1 is the correct choice.
https://www.terraform.io/docs/commands/environment-variables.html#tf_var_name

NEW QUESTION 197
- (Exam Topic 2)
You do not need to specify every required argument in the backend configuration. Omitting certain arguments may be desirable to avoid storing secrets, such as access keys, within the main configuration. When some or all of the arguments are omitted, we call this a ______.

A. First Time Configuration
B. Default Configuration
C. Changing Configuration
D. Partial Configuration
E. Incomplete Configuration

Answer: D

Explanation:
You do not need to specify every required argument in the backend configuration. Omitting certain arguments may be desirable to avoid storing secrets, such as access keys, within the main configuration. When some or all of the arguments are omitted, we call this a partial configuration.
With a partial configuration, the remaining configuration arguments must be provided as part of the initialization process. There are several ways to supply the remaining arguments:
* Interactively: Terraform will interactively ask you for the required values, unless interactive input is disabled. Terraform will not prompt for optional values.
* File: A configuration file may be specified via the init command line. To specify a file, use the
-backend-config=PATH option when running terraform init. If the file contains secrets it may be kept in a secure data store, such as Vault, in which case it must be downloaded to the local disk before running Terraform.
* Command-line key/value pairs: Key/value pairs can be specified via the init command line. Note that many shells retain command-line flags in a history file, so this isn't recommended for secrets. To specify a single key/value pair, use the -backend-config="KEY=VALUE" option when running terraform init.
https://www.terraform.io/docs/backends/config.html#partial-configuration

NEW QUESTION 202
- (Exam Topic 2)
Which of the following best describes the default local backend?

A. The local backend is where Terraform Enterprise stores logs to be processed by an log collector.
B. The local backend stores state on the local filesystem, locks the state using system APIs, and performs operations locally.
C. The local backend is the directory where resources deployed by Terraform have direct access to in order to update their current state.
D. The local backend is how Terraform connects to public cloud services, such as AWS, Azure, or GCP.

Answer: B

Explanation:
The local backend stores state on the local filesystem, locks that state using system APIs, and performs operations locally.

```
terraform { backend "local" {
path = "relative/path/to/terraform.tfstate"
}
}
```

https://www.terraform.io/docs/backends/types/local.html

NEW QUESTION 205
- (Exam Topic 2)
What does terrafom plan do ?

A. Create an execution plan by evaluating the difference between configuration file and state file.
B. Performs a refresh, unless explicitly disabled, and then apply the changes that are necessary to achieve the desired state specified in the configuration files.
C. Create an execution plan by evaluating the difference between configuration file and actual infrastructure.
D. Checks whether the execution plan for a set of changes matches your expectations by making changes to real resources or to the state.

Answer: A

NEW QUESTION 209
- (Exam Topic 3)
A colleague has informed you that a new version of a Terraform module that your team hosts on an Amazon S3 bucket is broken. The Amazon S3 bucket has versioning enabled. Your colleague tells you to make sure you are not using the latest version in your configuration. You have the following configuration block in your code that refers to the module:
module "infranet" { source = "s3::https://s3-us-west-2.amazonaws.com/infrabucket/infra_module.zip"} What is the best way to ensure that you are not using the latest version of the module?

A. Add a module version constraint in your configuration's backend block and specify a previous version.
B. Add a version key to the module configuration and specify a previous version.

C. Delete the latest version of the module in S3 to rollback to the previous version.
D. Add a version property to the module in Terraform's state file and specify a previous version.

Answer: C

Explanation:
Version constraints are supported only for modules installed from a module registry, such as the Terraform Registry or Terraform Cloud's private module registry. Other module sources can provide their own versioning mechanisms within the source string itself, or might not support versions at all. In particular, modules sourced from local file paths do not support version; since they're loaded from the same source repository.
Only Terraform Registries support module versioning by using the version key, one cannot configure a previous version of the module in the configuration. Deleting the latest version of the module in S3 is the only option of the available options that ensures you won't use the latest version. You could also modify the source URL to specify a versionId URL parameter for a previous version.
https://www.terraform.io/docs/configuration/modules.html#source

NEW QUESTION 211
- (Exam Topic 3)
In Terraform Enterprise, a workspace can be mapped to how many VCS repos?

A. 5
B. 2
C. 3
D. 1

Answer: D

Explanation:
A workspace can only be configured to a single VCS repo, however, multiple workspaces can use the same repo.
https://www.terraform.io/docs/cloud/workspaces/vcs.html

NEW QUESTION 215
- (Exam Topic 3)
Eric needs to make use of module within his terraform code. Should the module always be public and open-source to be able to be used?

A. False
B. True

Answer: A

Explanation:
Terraform module need not be public and open-source. Module can be placed in
* Local paths
* Terraform Registry
* GitHub
* Bitbucket
* Generic Git, Mercurial repositories
* HTTP URLs
* S3 buckets
* GCS buckets https://www.terraform.io/docs/modules/sources.html

NEW QUESTION 219
- (Exam Topic 3)
You are reviewing Terraform configurations for a big project in your company. You noticed that there are several identical sets of resources that appear in multiple configurations. What feature of Terraform would you recommend to use to reduce the amount of cloned configuration between the different configurations?

A. Packages
B. Backends
C. Provisioners
D. Modules

Answer: D

Explanation:
Modules are reusable configuration packages that Terraform can share through a variety of sources including Terraform Registries, GitHub, and Amazon S3 buckets.
A module is a container for multiple resources that are used together. Modules can be used to create lightweight abstractions, so that you can describe your infrastructure in terms of its architecture, rather than directly in terms of physical objects.
Modules are reusable configuration packages that Terraform can share through a variety of sources including Terraform Registries, GitHub, and Amazon S3 buckets.
https://www.terraform.io/docs/modules/index.html

NEW QUESTION 223
- (Exam Topic 3)
Which of the following challenges would Terraform be a candidate for solving? (Select THREE)

A. Enable self-service infrastructure to allocate resources on your proprietary private cloud.
B. Reduce the number of workflows needed for managing infrastructure across each of the companies public and private clouds.
C. Utilize a single tool for all of the infrastructure and configuration management needs.
D. Have a single interoperable tool to manage the variety of services including GitHub repositories, MySQL database, and Kubernetes clusters.

Answer: ABD

NEW QUESTION 228
- (Exam Topic 3)
Which of the below options is a valid interpolation syntax for retrieving a data source?

A. ${google_storage_bucket.backend}
B. ${azurerm_resource_group.test.data}
C. ${aws_instance.web.id.data}
D. ${data.google_dns_keys.foo_dns_keys.key_signing_keys[0].ds_record}

Answer: D

Explanation:
Data source attributes are interpolated with the general syntax data.TYPE.NAME.ATTRIBUTE. The interpolation for a resource is the same but without the data. prefix (TYPE.NAME.ATTRIBUTE).
https://www.terraform.io/docs/configuration-0-11/interpolation.html#attributes-of-a-data-source

NEW QUESTION 231
- (Exam Topic 3)
The canonical format may change in minor ways between Terraform versions, so after upgrading Terraform it is recommended to proactively run.

A. terraform fmt
B. terraform init
C. terraform validate
D. terraform plan

Answer: A

NEW QUESTION 232
- (Exam Topic 3)
Once a resource is marked as tainted, the next plan will show that the resource will be ______ and ______ and the next apply will implement this change.

A. recreated and tainted
B. destroyed and not recreated
C. tainted and not destroyed
D. destroyed and recreated

Answer: D

NEW QUESTION 234
- (Exam Topic 3)
Forcing the recreation of a resource is useful when you want a certain side effect of recreation that is not visible in the attributes of a resource. What command will do this?

A. terraform taint
B. terraform apply
C. terraform graph
D. terraform refresh

Answer: A

Explanation:
The terraform taint command manually marks a Terraform-managed resource as tainted, forcing it to be destroyed and recreated on the next apply.
This command will not modify infrastructure, but does modify the state file in order to mark a resource as tainted. Once a resource is marked as tainted, the next plan will show that the resource will be destroyed and recreated and the next apply will implement this change.
Forcing the recreation of a resource is useful when you want a certain side effect of recreation that is not visible in the attributes of a resource. For example: re-running provisioners will cause the node to be different or rebooting the machine from a base image will cause new startup scripts to run.
Note that tainting a resource for recreation may affect resources that depend on the newly tainted resource. For example, a DNS resource that uses the IP address of a server may need to be modified to reflect the potentially new IP address of a tainted server. The plan command will show this if this is the case.
This example will taint a single resource:
$ terraform taint aws_security_group.allow_all
The resource aws_security_group.allow_all in the module root has been marked as tainted. https://www.terraform.io/docs/commands/taint.html

NEW QUESTION 236
- (Exam Topic 3)
Which of the following value will be accepted for var1? variable "var1" {
type = string
}

A. None of the above
B. Both A and B
C. "5"
D. 5

Answer: B

Explanation:

Terraform automatically converts number and bool values to strings when needed.

NEW QUESTION 237
- (Exam Topic 3)
Ric wants to enable detail logging and he wants highest verbosity of logs. Which of the following environment variable settings is correct option for him to select.

A. Set TF_LOG = DEBUG
B. Set VAR_TF = TRACE
C. Set TF_LOG = TRACE
D. Set VAR_TF_LOG = TRACE

Answer: C

Explanation:
https://www.terraform.io/docs/internals/debugging.html

NEW QUESTION 238
- (Exam Topic 3)
If you delete a remote backend from the configuration, will you need to rebuild your state files locally?

A. False
B. True

Answer: A

Explanation:
You can change your backend configuration at any time. You can change both the configuration itself as well as the type of backend (for example from "consul" to "s3").
Terraform will automatically detect any changes in your configuration and request a reinitialization. As part of the reinitialization process, Terraform will ask if you'd like to migrate your existing state to the new configuration. This allows you to easily switch from one backend to another.
https://www.terraform.io/docs/backends/config.html#changing-configuration

NEW QUESTION 242
- (Exam Topic 3)
Which of the following Terraform commands will automatically refresh the state unless supplied with additional flags or arguments? Choose TWO correct answers.

A. terraform state
B. terraform apply
C. terraform plan
D. terraform validate
E. terraform output

Answer: BC

NEW QUESTION 245
- (Exam Topic 3)
The Security Operations team of ABC Enterprise wants to mandate that all the Terraform configuration that creates an S3 bucket must have encryption feature enabled. What is the best way to achieve it?

A. Use Sentinel Policies.
B. Use S3 bucket policy.
C. Create a script that checks the encryption parameter is enabled on every git commit.
D. Shared a SOP to engineers to mandate encryption feature on S3.

Answer: A

Explanation:
Sentinel is an embedded policy-as-code framework integrated with the HashiCorp Enterprise products. It enables fine-grained, logic-based policy decisions, and can be extended to use information from external sources.
Using Sentinel with Terraform Cloud involves:
* Defining the policies - Policies are defined using the policy language with imports for parsing the Terraform plan, state and configuration.
* Managing policies for organizations - Users with permission to manage policies can add policies to their organization by configuring VCS integration or uploading policy sets through the API. They also define which workspaces the policy sets are checked against during runs. (More about permissions.)
* Enforcing policy checks on runs - Policies are checked when a run is performed, after the terraform plan but before it can be confirmed or the terraform apply is executed.
* Mocking Sentinel Terraform data - Terraform Cloud provides the ability to generate mock data for any run within a workspace. This data can be used with the Sentinel CLI to test policies before deployment.
https://www.terraform.io/docs/cloud/sentinel/index.html

NEW QUESTION 248
- (Exam Topic 3)
Terraform Cloud always encrypts state at rest and protects it with TLS in transit. Terraform Cloud also knows the identity of the user requesting state and maintains a history of state changes.

A. False
B. True

Answer: B

Explanation:
Terraform Cloud always encrypts state at rest and protects it with TLS in transit. Terraform Cloud also knows the identity of the user requesting state and maintains a history of state changes. This can be used to control access and track activity. Terraform Enterprise also supports detailed audit logging.
https://www.terraform.io/docs/state/sensitive-data.html#recommendations

NEW QUESTION 251
- (Exam Topic 3)
What happens when a terraform apply command is executed?

A. Creates the execution plan for the deployment of resources.
B. Applies the changes required in the target infrastructure in order to reach the desired configuration.
C. The backend is initialized and the working directory is prepped.
D. Reconciles the state Terraform knows about with the real-world infrastructure.

Answer: B

Explanation:
The terraform apply command is used to apply the changes required to reach the desired state of the configuration, or the pre-determined set of actions generated by a terraform plan execution plan.
https://www.terraform.io/docs/commands/apply.html

NEW QUESTION 256
- (Exam Topic 3)
When multiple engineers start deploying infrastructure using the same state file, what is a feature of remote state storage that is critical to ensure the state doesn't become corrupt?

A. Object Storage
B. State Locking
C. WorkSpaces
D. Encryption

Answer: B

Explanation:
If supported by your backend, Terraform will lock your state for all operations that could write state. This prevents others from acquiring the lock and potentially corrupting your state.
State locking happens automatically on all operations that could write state. You won't see any message that it is happening. If state locking fails, Terraform will not continue. You can disable state locking for most commands with the -lock flag but it is not recommended.
If acquiring the lock is taking longer than expected, Terraform will output a status message. If Terraform doesn't output a message, state locking is still occurring if your backend supports it.
Not all backends support locking. Please view the list of backend types for details on whether a backend supports locking or not.
https://www.terraform.io/docs/state/locking.html

NEW QUESTION 260
- (Exam Topic 3)
Which of the below command will upgrade the provider version to the latest acceptable one?

A. terraform plan upgrade
B. terraform provider -upgrade
C. terraform init -upgrade
D. terraform init -update

Answer: C

Explanation:
To upgrade to the latest acceptable version of each provider, run terraform init -upgrade. This command also upgrades to the latest versions of all Terraform modules.
https://www.terraform.io/docs/configuration/providers.html

NEW QUESTION 264
- (Exam Topic 3)
Which of the following variable definition files will terraform load automatically?

A. terraform.tfvar
B. Any files with names ending in .auto.tfvars.json
C. terraform.tfvars
D. terraform.tfvars.json

Answer: BCD

Explanation:
Terraform also automatically loads a number of variable definitions files if they are present: Files named exactly terraform.tfvars or terraform.tfvars.json.
Any files with names ending in .auto.tfvars or .auto.tfvars.json. https://www.terraform.io/docs/configuration/variables.html
https://www.terraform.io/docs/configuration/variables.html#variable-definitions-tfvars-files

NEW QUESTION 269
- (Exam Topic 3)

You have already set TF_LOG = DEBUG to enable debug log. Now you want to always write the log to the directory you're currently running terraform from. what should you do to achieve this.

A. Run the command export TF_LOG_FILE=./terraform.log.
B. Run the command export TF_LOG_PATH=./terraform.log.
C. Run the command export TF_DEBUG_PATH=./terraform.log.
D. No explicit action require
E. Terraform will take care of this as you have enable TF_LOG.

Answer: B

Explanation:
https://www.terraform.io/docs/commands/environment-variables.html

NEW QUESTION 273
- (Exam Topic 3)
You also have a defined the following environment variables in your shell: TF_itemNum =6, TF_VAR_itemNum =9. You also have a terraform.tfvars file with the following contents
itemNum = 7
When you run the following apply command, what is the value assigned to the itemNum variable? terraform apply -var itemNum =4

A. 10
B. 6
C. 1
D. 4
E. 3

Answer: D

Explanation:
The -var and -var-file methods of assigning variables have the highest precedence. https://www.terraform.io/docs/configuration/variables.html

NEW QUESTION 277
- (Exam Topic 3)
You have created an AWS EC2 instance of type t2.micro through your terraform configuration file ec2.tf . Now you want to change the instance type from t2.micro to t2.medium. Accordingly you have changed your configuration file and and ran terraform plan. After running terraform plan you check the output and saw one instance will be updated from t2.micro --> t2.medium. After this you went to grab a coffee without running terraform apply and meanwhile a member of your team changed the instance type of that EC2 instance to t2.medium from aws console. After coming to your desk you run terraform apply. What will happen?

A. No resource will be updated and you will see the message : Apply Complete ! Resources : 0 added, 0 changed, 0 destroyed.
B. The instance type will be changed to t2.micro and again will be changed to t2.medium
C. terraform apply will through an error.
D. 1 resource will be updated and you will see the message : Apply Complete ! Resources : 0 added, 1 changed, 0 destroyed.

Answer: A

NEW QUESTION 279
- (Exam Topic 3)
What kind of resource dependency is stored in terraform.tfstate file?

A. Both implicit and explicit dependencies are stored in state file.
B. Only explicit dependencies are stored in state file.
C. Only implicit dependencies are stored in state file.
D. No dependency information is stored in state file.

Answer: A

Explanation:
Terraform state captures all dependency information, both implicit and explicit. One purpose for state is to determine the proper order to destroy resources. When resources are created all of their dependency information is stored in the state. If you destroy a resource with dependencies, Terraform can still determine the correct destroy order for all other resources because the dependencies are stored in the state.
https://www.terraform.io/docs/state/purpose.html#metadata

NEW QUESTION 282
- (Exam Topic 3)
You can migrate the Terraform backend but only if there are no resources currently being managed.

A. False
B. True

Answer: A

Explanation:
If you need to migrate to another backend, such as Terraform Cloud, so you can continue managing it. By migrating your Terraform state, you can hand off infrastructure without de-provisioning anything.
https://www.terraform.io/docs/cloud/migrate/index.html

NEW QUESTION 285

- (Exam Topic 3)
Terraform-specific settings and behaviors are declared in which configuration block type?

A. provider
B. terraform
C. resource
D. data

Answer: B

Explanation:
The special terraform configuration block type is used to configure some behaviors of Terraform itself, such as requiring a minimum Terraform version to apply your configuration.
Example terraform {
required_version = "> 0.12.0"
}
https://www.terraform.io/docs/configuration/terraform.html

NEW QUESTION 286
- (Exam Topic 3)
By default, provisioners that fail will also cause the Terraform apply itself to error. How can you change this default behavior within a provisioner?

A. provisioner "local-exec" { on_failure = "next" }
B. provisioner "local-exec" { when = "failure" terraform apply }
C. provisioner "local-exec" { on_failure = "continue" }
D. provisioner "local-exec" { on_failure = continue }

Answer: C

Explanation:
https://www.terraform.io/docs/provisioners/index.html

NEW QUESTION 287
- (Exam Topic 3)
Multiple providers can be declared within a single Terraform configuration file.

A. True
B. False

Answer: A

Explanation:
You can optionally define multiple configurations for the same provider, and select which one to use on a per-resource or per-module basis. The primary reason for this is to support multiple regions for a cloud platform; other examples include targeting multiple Docker hosts, multiple Consul hosts, etc.
To include multiple configurations for a given provider, include multiple provider blocks with the same provider name, but set the alias meta-argument to an alias name to use for each additional configuration.
For Example
# The default provider configuration provider "aws" {
region = "us-east-1"
}
# Additional provider configuration for west coast region provider "aws" {
alias = "west" region = "us-west-2"
}
The provider block without alias set is known as the default provider configuration. When alias is set, it creates an additional provider configuration. For providers that have no required configuration arguments, the implied empty configuration is considered to be the default provider configuration.
https://www.terraform.io/docs/configuration/providers.html

NEW QUESTION 292
- (Exam Topic 3)
Every region in AWS has a different AMI ID for Linux and these are keep on changing. What is the best approach to create the EC2 instances that can deal with different AMI IDs based on regions?

A. Use data source aws_ami.
B. Create a map of region to ami id.
C. Create different configuration file for different region.
D. None of the above

Answer: A

Explanation:
https://www.terraform.io/docs/configuration/data-sources.html

NEW QUESTION 294
- (Exam Topic 3)
A single terraform resource file that defines an aws_instance resource can simply be renamed to vsphere_virtual_machine in order to switch cloud providers.

A. True
B. False

Answer: B

Explanation:
Every provider has its own required and allowed declarations none of which match between cloud providers.

NEW QUESTION 299
- (Exam Topic 3)
Why is it a good idea to declare the required version of a provider in a Terraform configuration file?
* 1. terraform
* 2. {
* 3. required_providers
* 4. {
* 5. aws = "~> 1.0"
* 6. }
* 7. }

A. To remove older versions of the provider.
B. To ensure that the provider version matches the version of Terraform you are using.
C. Providers are released on a separate schedule from Terraform itself; therefore a newer version could introduce breaking changes.
D. To match the version number of your application being deployed via Terraform.

Answer: C

NEW QUESTION 302
- (Exam Topic 3)
When using Terraform in a team it is important for everyone to be working with the same state so that operations will be applied to the same remote objects. Which of the below option is a recommended solution for this?

A. Remote State
B. Module
C. Use the cached state and treat this as the record of truth.
D. Workspace

Answer: A

Explanation:
https://www.terraform.io/docs/state/remote.html

NEW QUESTION 307
- (Exam Topic 3)
Mary has created a database instance in AWS and for ease of use is outputting the value of the database password with the following code:
* 1. output "db_password"
* 2. {
* 3. value = local.db_password
* 4. }
Mary wants to hide the output value in the CLI after terraform apply? What is the best way?

A. Use secure parameter
B. Use sensitive parameter
C. Use cryptographic hash
D. Encrypt the value using encrypt() function

Answer: B

NEW QUESTION 310
- (Exam Topic 3)
Multiple configurations for the same provider can be used in a single configuration file.

A. False
B. True

Answer: B

Explanation:
You can optionally define multiple configurations for the same provider, and select which one to use on a per-resource or per-module basis. The primary reason for this is to support multiple regions for a cloud platform; other examples include targeting multiple Docker hosts, multiple Consul hosts, etc.
To include multiple configurations for a given provider, include multiple provider blocks with the same provider name, but set the alias meta-argument to an alias name to use for each additional configuration. For example:

```
# The default provider configuration provider "aws" {
region = "us-east-1"
}
# Additional provider configuration for west coast region provider "aws" {
alias = "west" region = "us-west-2"
}
```

The provider block without alias set is known as the default provider configuration. When alias is set, it creates an additional provider configuration. For providers that have no required configuration arguments, the implied empty configuration is considered to be the default provider configuration.
https://www.terraform.io/docs/configuration/providers.html#alias-multiple-provider-instances

NEW QUESTION 312
- (Exam Topic 3)
A user has created three workspaces using the command line - prod, dev, and test. The user wants to create a fourth workspace named stage. Which command will the user execute to accomplish this?

A. terraform workspace new stage
B. terraform workspace -new stage
C. terraform workspace -create stage
D. terraform workspace create stage

Answer: A

Explanation:
The terraform workspace new command is used to create a new workspace. https://www.terraform.io/docs/commands/workspace/new.html

NEW QUESTION 317
- (Exam Topic 3)
Refer to the following terraform variable definition
variable "track_tag" { type = list default = ["data_ec2","integration_ec2","digital_ec2"]} track_tag = { Name = element(var.track_tag,count.index)}
If count.index is set to 2, which of the following values will be assigned to the name attribute of track_tag variable?

A. integration_ec2
B. digital_ec2
C. track_tag
D. data_ec2

Answer: B

NEW QUESTION 321
- (Exam Topic 4)
Using the terraform state rm command against a resource will destroy it.

A. True
B. False

Answer: B

NEW QUESTION 326
- (Exam Topic 4)
How can a ticket-based system slow down infrastructure provisioning and limit the ability to scale? (Choose two.)

A. A full audit trail of the request and fulfillment process is generated
B. A request must be submitted for infrastructure changes
C. As additional resources are required, more tickets are submitted
D. A catalog of approved resources can be accessed from drop down lists in a request form

Answer: BC

NEW QUESTION 327
- (Exam Topic 4)
Valarie has created a database instance in AWS and for ease of use is outputting the value of the database password with the following code. Valarie wants to hide the output value in the CLI after terraform apply that's why she has used sensitive parameter.
* 1. output "db_password" {
* 2. value = local.db_password
* 3. sensitive = true
* 4. }
Since sensitive is set to true, will the value associated with db password be available in plain-text in the state file for everyone to read?

A. Yes
B. No

Answer: A

Explanation:
Outputs can be marked as containing sensitive material by setting the sensitive attribute to true, like this: output "sensitive" {
sensitive = true value = VALUE
}
When outputs are displayed on-screen following a terraform apply or terraform refresh, sensitive outputs are redacted, with <sensitive> displayed in place of their value.
Limitations of Sensitive Outputs
The values of sensitive outputs are still stored in the Terraform state, and available using the terraform output command, so cannot be relied on as a sole means of protecting values.
Sensitivity is not tracked internally, so if the output is interpolated in another module into a resource, the value will be displayed.

NEW QUESTION 328
- (Exam Topic 4)
HashiCorp offers multiple versions of Terraform, including Terraform open-source, Terraform Cloud, and Terraform Enterprise. Which of the following Terraform features are only available in the Enterprise edition? (select four)

A. SAML/SSO
B. Sentinel
C. Audit Logs
D. Clustering
E. Private Module Registry
F. Private Network Connectivity

Answer: ACF

Explanation:

While there are a ton of features that are available to open source users, many features that are part of the Enterprise offering are geared towards larger teams and enterprise functionality. To see what specific features are part of Terraform Cloud and Terraform Enterprise, check out this link.
https://www.hashicorp.com/products/terraform/pricing/

NEW QUESTION 330
- (Exam Topic 4)
What is the result of the following terraform function call?

A. True
B. False

Answer: B

Explanation:

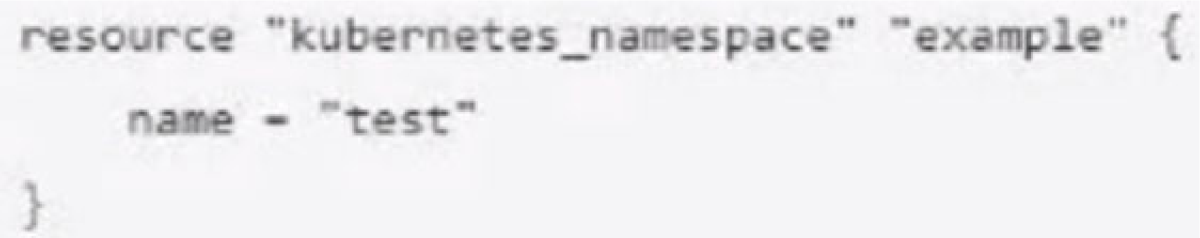
https://www.terraform.io/docs/configuration/functions/index.html

NEW QUESTION 333
- (Exam Topic 4)
In the example below, the depends_on argument creates what type of dependency?

A. implicit dependency
B. internal dependency
C. explicit dependency
D. non-dependency resource

Answer: C

NEW QUESTION 336
- (Exam Topic 4)
How would you reference the attribute "name* of this fictitious resource in HCL?



```
resource "kubernetes_namespace" "example" {
    name - "test"
}
```

A. resource.kubrnetes_namespace>example.name
B. kubernetes_namespace.test.name
C. kubernetes_namespace.example,name
D. data kubernetes_namespace.name
E. None of the above

Answer: C

Explanation:
https://www.terraform.io/language/expressions/references#references-to-resource-attributes

NEW QUESTION 339
- (Exam Topic 4)
Your team has started using terraform OSS in a big way , and now wants to deploy multi region deployments (DR) in aws using the same terraform files . You want to deploy the same infra (VPC,EC2 …) in both us-east-1 ,and us-west-2 using the same script , and then peer the VPCs across both the regions to enable DR traffic. But , when you run your script , all resources are getting created in only the default provider region. What should you do? Your provider setting is as below
# The default provider configuration provider "aws" { region = "us-east-1" }

A. No way to enable this via a single script . Write 2 different scripts with different default providers in the 2 scripts , one for us-east , another for us-west.
B. Create a list of regions , and then use a for-each to iterate over the regions , and create the same resources ,one after the one , over the loop.
C. Use provider alias functionality , and add another provider for us-west region . While creating the resources using the tf script , reference the appropriate provider (using the alias).
D. Manually create the DR region , once the Primary has been created , since you are using terraform OSS , and multi region deployment is only available in Terraform Enterprise.

Answer: C

Explanation:

You can optionally define multiple configurations for the same provider, and select which one to use on a per-resource or per-module basis. The primary reason for this is to support multiple regions for a cloud platform; other examples include targeting multiple Docker hosts, multiple Consul hosts, etc.
To include multiple configurations for a given provider, include multiple provider blocks with the same provider name, but set the alias meta-argument to an alias name to use for each additional configuration. For example:
# The default provider configuration provider "aws" {
region = "us-east-1"
}
# Additional provider configuration for west coast region provider "aws" {
alias = "west" region = "us-west-2"
}
https://www.terraform.io/docs/configuration/providers.html

NEW QUESTION 340
- (Exam Topic 4)
You have configured an Auto Scaling group in AWS to automatically scale the number of instances behind a load balancer based on the instances CPU utilization. The instances are configured using a Launch Configuration. You have observed that the Auto Scaling group doesn't successfully scale when you apply changes that require replacing the Launch Configuration. Why is this happening?

A. You need to configure an explicit dependency for the Auto Scaling group using the depends_on meta-parameter.
B. You need to configure an explicit dependency for the Launch Configuration using the depends_on meta-parameter.
C. You need to configure the Auto Scaling group's create_before_destroy meta-parameter.
D. You need to configure the Launch Configuration's create_before_destroy meta-parameter.

Answer: D

Explanation:
https://www.terraform.io/docs/providers/aws/r/launch_configuration.html#using-withautoscaling-groups

NEW QUESTION 342
- (Exam Topic 4)
Where can Terraform not load a provider from?

A. Plugins directory
B. Provider plugin cache
C. Official HashrCorp distribution on releases, hashicorp.com
D. Source code

Answer: D

NEW QUESTION 343
- (Exam Topic 4)
Terra form installs its providers during which phase?

A. Man
B. Init
C. Refresh
D. All of the above

Answer: B

Explanation:
Providers are installed in the init phase

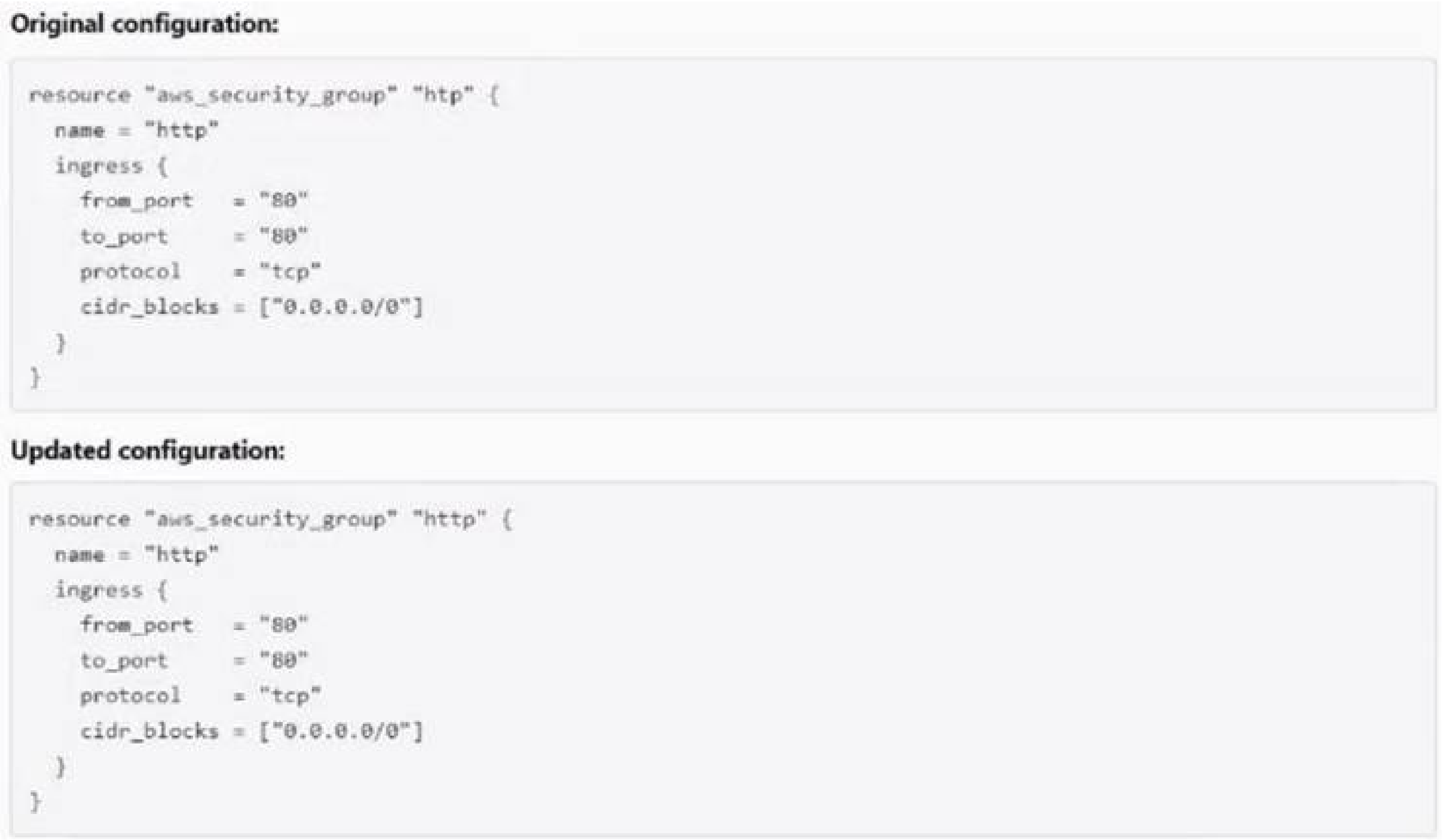
NEW QUESTION 346
- (Exam Topic 4)
John is writing a module and within the module, there are multiple places where he has to use the same
conditional expression but he wants to avoid repeating the same values or expressions multiple times in a configuration,. What is a better approach to dealing with this?

A. Local Values
B. Expressions
C. Functions
D. Variables

Answer: A

Explanation:
A local value assigns a name to an expression, allowing it to be used multiple times within a module without repeating it.
https://www.terraform.io/docs/configuration/locals.html

NEW QUESTION 347
- (Exam Topic 4)
You have modified your Terraform configuration to fix a typo in the Terraform ID of a resource from aws_security_group.http to aws_security_group.http



Original configuration:

```
resource "aws_security_group" "htp" {
  name = "http"
  ingress {
    from_port   = "80"
    to_port     = "80"
    protocol    = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }
}
```

Updated configuration:

```
resource "aws_security_group" "http" {
  name = "http"
  ingress {
    from_port   = "80"
    to_port     = "80"
    protocol    = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }
}
```

Which of the following commands would you run to update the ID in state without destroying the resource?

A. terraform refresh
B. terraform apply
C. terraform mv aws-security-group.htp aws-security-group.http

Answer: C

Explanation:
The terraform state mv command changes which resource address in your configuration is associated with a particular real-world object. Use this to preserve an object when renaming a resource, or when moving a resource into or out of a child module.

NEW QUESTION 349
- (Exam Topic 4)
Provider dependencies are created in several different ways. Select the valid provider dependencies from the following list: (select three)

A. Explicit use of a provider block in configuration, optionally including a version constraint.
B. Use of any resource belonging to a particular provider in a resource or data block in configuration.
C. Existence of any resource instance belonging to a particular provider in the current state.
D. Existence of any provider plugins found locally in the working directory.

Answer: ABC

Explanation:
The existence of a provider plugin found locally in the working directory does not itself create a provider dependency. The plugin can exist without any reference to it in the terraform configuration. https://www.terraform.io/docs/commands/providers.html

NEW QUESTION 351
- (Exam Topic 4)
Which of the following statements about Terraform modules is not true?

A. Modules must be publicly accessible
B. Modules can be called multiple times
C. Module is a container for one or more resources
D. Modules can call other modules

Answer: A

Explanation:
In addition to modules from the local filesystem, Terraform can load modules from a public or private registry. Also, members of your organization might produce modules specifically crafted for your own infrastructure needs. Source: https://www.terraform.io/language/modules

NEW QUESTION 352
- (Exam Topic 4)
Which of the following arguments are required when declaring a Terraform output?

A. sensitive
B. description
C. default
D. value

Answer: D

NEW QUESTION 355
- (Exam Topic 4)
Given the below resource configuration - resource "aws_instance" "web" { # ... count = 4 }
What does the terraform resource address aws_instance.web refer to?

A. It refers to all 4 web instances , together , for further individual segregation , indexing is required , with a 0 based index.
B. It refers to the last web EC2 instance , as by default , if no index is provided , the last / N-1 index is used.
C. It refers to the first web EC2 instance out of the 4 ,as by default , if no index is provided , the first / 0th index is used.
D. The above will result in a syntax error , as it is not syntactically correct . Resources defined using count , can only be referenced using indexes.

Answer: A

Explanation:
A Resource Address is a string that references a specific resource in a larger infrastructure. An address is made up of two parts:
[module path][resource spec] Module path:
A module path addresses a module within the tree of modules. It takes the form: module.A.module.B.module.C...
Multiple modules in a path indicate nesting. If a module path is specified without a resource spec, the address applies to every resource within the module. If the module path is omitted, this addresses the root module.
Given a Terraform config that includes: resource "aws_instance" "web" {
# ...
count = 4
}
An address like this: aws_instance.web[3]
Refers to only the last instance in the config, and an address like this: aws_instance.web
Refers to all four "web" instances. https://www.terraform.io/docs/internals/resource-addressing.html

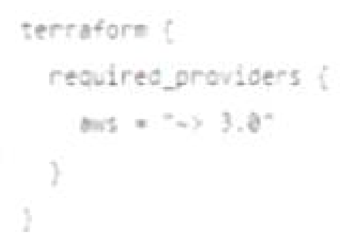
NEW QUESTION 358
- (Exam Topic 4)
Which of the following statements best describes the Terraform list(...) type?

A. a collection of values where each is identified by a string label.
B. a sequence of values identified by consecutive whole numbers starting with zero.
C. a collection of unique values that do not have any secondary identifiers or ordering.
D. a collection of named attributes that each have their own type.

Answer: B

Explanation:
A terraform list is a sequence of values identified by consecutive whole numbers starting with zero.
https://www.terraform.io/docs/configuration/types.html#structural-types

NEW QUESTION 360
- (Exam Topic 4)
What does this code do?



```
terraform {
  required_providers {
    aws = "~> 3.0"
  }
}
```

A. Requires any version of the AWS provider > = 3.0 and < 4.0
B. Requires any version of the AWS provider > = 3.0
C. Requires any version of the AWS provider after the 3.0 major release like 4.1
D. Requires any version of the AWS provider > 3.0

Answer: A

Explanation:
https://www.terraform.io/language/expressions/version-constraints#-3
Allows only the rightmost version component to increment. For example, to allow new patch releases within a specific minor release, use the full version number:
~> 1.0.4 will allow installation of 1.0.5 and 1.0.10 but not 1.1.0

NEW QUESTION 362
- (Exam Topic 4)
In the example below, where is the value of the DNS record's IP address originating from?
* 1. resource "aws_route53_record" "www"
* 2. {
* 3. zone_id = aws_route53_zone.primary.zone_id
* 4. name = "www.example.com"
* 5. type = "A"
* 6. ttl = "300"
* 7. records = [module.web_server.instance_ip_address] 8. }

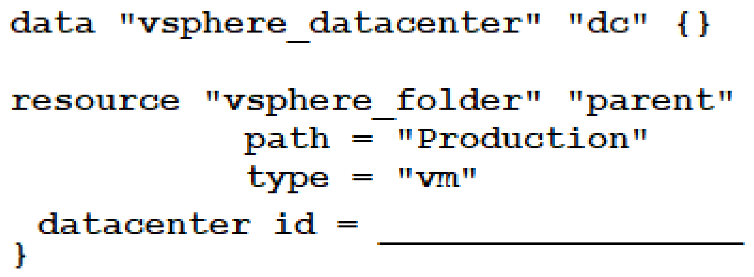
A. The regular expression named module.web_server
B. The output of a module named web_server

C. By querying the AWS EC2 API to retrieve the IP address
D. Value of the web_server parameter from the variables.tf file

Answer: B

Explanation:
In a parent module, outputs of child modules are available in expressions as module.<MODULE NAME>.<OUTPUT NAME>.
For example, if a child module named web_server declared an output named instance_ip_address, you could access that value as module.web_server.instance_ip_address.

NEW QUESTION 365
- (Exam Topic 4)
How would you be able to reference an attribute from the vsphere_datacenter data source for use with the argument within the vsprere_folder resource in the following configuration?



```
data "vsphere_datacenter" "dc" {}

resource "vsphere_folder" "parent" {
             path = "Production"
             type = "vm"
  datacenter id = ___________________
}
```

A. vsphere_datacenter.dc.id
B. data.vsphere_datacenter.dc
C. data.dc,id
D. data.vsphere_datacenter.dc.id

Answer: D

NEW QUESTION 370
- (Exam Topic 4)
You just upgraded the version of a provider in an existing Terraform project. What do you need to do to install the new provider?

A. Run terraform apply -upgrade
B. Run terraform init -upgrade
C. Run terraform refresh
D. Upgrade your version of Terraform

Answer: B

Explanation:
[-upgrade] - Opt to upgrade modules and plugins as part of their respective installation steps. See the sections below for more details. Reference: https://www.terraform.io/cli/commands/init#upgrade

NEW QUESTION 372
- (Exam Topic 4)
Which of the following is true about Terraform's implementation of infrastructure as code? (Choose two.)

A. It is only compatible with AWS infrastructure management
B. You cannot reuse infrastructure configuration
C. You can version your infrastructure configuration
D. It requires manual configuration of infrastructure resources
E. It allows you to automate infrastructure provisioning

Answer: CE

NEW QUESTION 377
- (Exam Topic 4)
You're preparing to install Terraform on client workstations and want to see which operating systems are supported. Which of the following operating systems is supported?

A. Windows
B. Amazon Linux
C. FreeBSD
D. Solaris
E. MacOS
F. All of the above

Answer: F

NEW QUESTION 380
- (Exam Topic 4)
Which of the following locations can Terraform use as a private source for modules? (Choose two.)

A. Internally hosted SCM (Source Control Manager) platform
B. Public Terraform Module Registry
C. Private repository on GitHub
D. Public repository on GitHub

Answer: AC

NEW QUESTION 381
- (Exam Topic 4)
Your configuration file has been locked accidentally. What of the following command would you use to unlock?

A. terraform filename-unlock
B. delete the file and create a new state file
C. terraform force-unlock
D. state.tf-unlock

Answer: C

NEW QUESTION 385
- (Exam Topic 4)
You have created a main.tr Terraform configuration consisting of an application server, a database, and a load balancer. You ran terraform apply and all resources were created successfully. Now you realize that you do not actually need the load balancer so you run terraform destroy without any flags What will happen?

A. Terraform will destroy the application server because it is listed first in the code
B. Terraform will prompt you to confirm that you want to destroy all the infrastructure
C. Terraform will destroy the main.tf file
D. Terraform will prompt you to pick which resource you want to destroy
E. Terraform will immediately destroy all the infrastructure

Answer: B

NEW QUESTION 388
- (Exam Topic 4)
You have to initialize a Terraform backend before it can be configured.

A. True
B. False

Answer: A

Explanation:
Initialization
Whenever a configuration's backend changes, you must run terraform init again to validate and configure the backend before you can perform any plans, applies, or state operations.
When changing backends, Terraform will give you the option to migrate your state to the new backend. This lets you adopt backends without losing any existing state.
To be extra careful, we always recommend manually backing up your state as well. You can do this by simply copying your terraform.tfstate file to another location. The initialization process should create a backup as well, but it never hurts to be safe!
https://www.terraform.io/language/settings/backends/configuration

NEW QUESTION 393
- (Exam Topic 4)
A Terraform backend determines how Terraform loads state and stores updates when you execute _____.

A. apply
B. taint
C. destroy
D. All of the above
E. None of the above

Answer: D

NEW QUESTION 394
- (Exam Topic 4)
All modules published on the official Terraform Module Registry have been verified by HashiCorp.

A. True
B. False

Answer: B

Explanation:
https://registry.terraform.io/
Only modules considered "Verified Modules" are reviewed by Hashicorp, otherwise anyone can publish modules on the Terraform Registry.
Reference: https://www.terraform.io/registry/modules/verified https://www.terraform.io/registry/modules/publish

NEW QUESTION 399

- (Exam Topic 4)
Which Terraform command will check and report errors within modules, attribute names, and value types to make sure they are syntactically valid and internally consistent?

A. terraform validate
B. terraform format
C. terraform fmt
D. terraform show

Answer: A

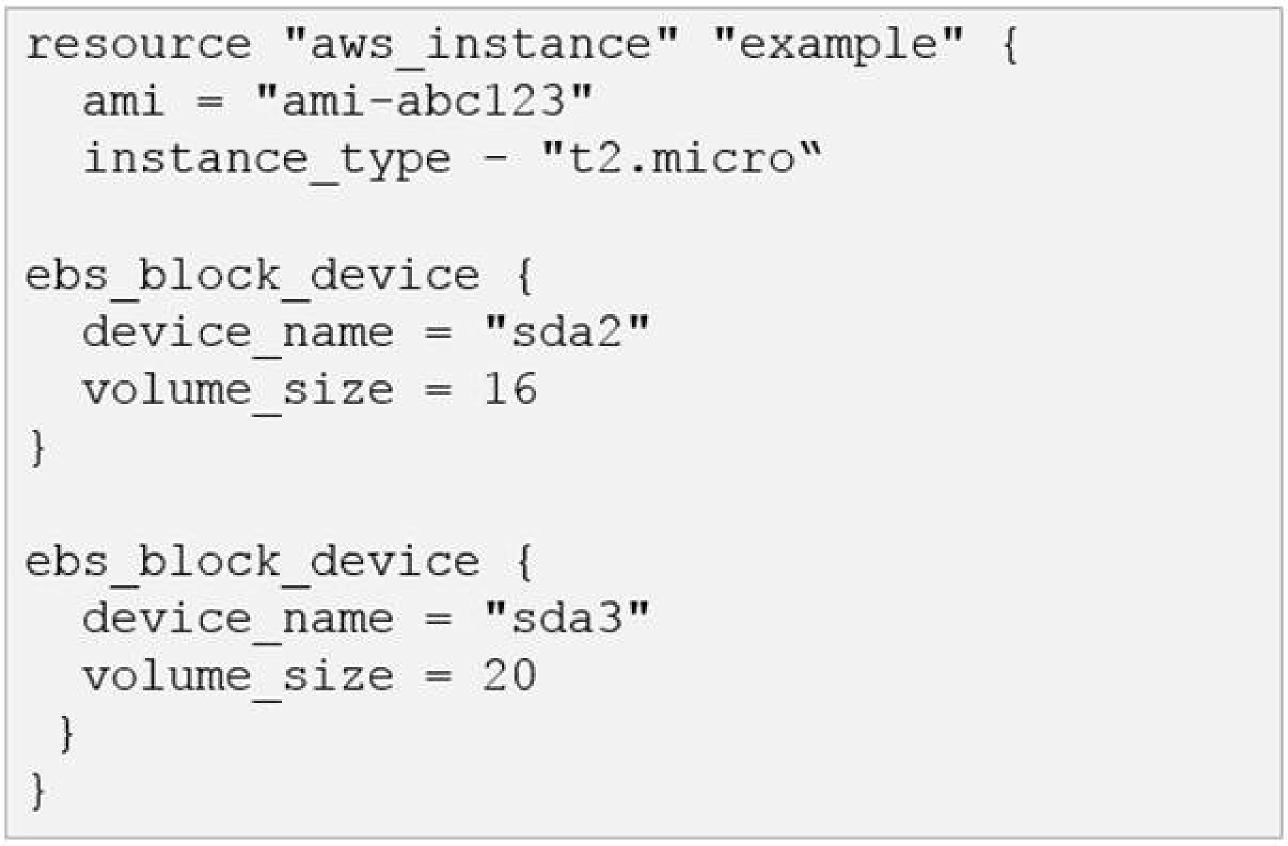
Explanation:
The terraform validate command validates the configuration files in a directory, referring only to the configuration and not accessing any remote services such as remote state, provider APIs, etc.
Validate runs checks that verify whether a configuration is syntactically valid and internally consistent, regardless of any provided variables or existing state. It is thus primarily useful for general verification of reusable modules, including the correctness of attribute names and value types.
It is safe to run this command automatically, for example as a post-save check in a text editor or as a test step for a re-usable module in a CI system.

NEW QUESTION 404
- (Exam Topic 4)
colleagues is new toTerraform and wants to add a new workspace named new-hire. What command he should execute from the following?

A. terraform workspace-new-new-hire
B. terraform workspace new new hire
C. terraform workspace init new-hire
D. terraform workspace new-hire

Answer: B

NEW QUESTION 407
- (Exam Topic 4)
How would you reference the Volume IDs associated with the ebs_block_device blocks in this configuration?



```
resource "aws_instance" "example" {
  ami = "ami-abc123"
  instance_type - "t2.micro"

ebs_block_device {
  device_name = "sda2"
  volume_size = 16
}

ebs_block_device {
  device_name = "sda3"
  volume_size = 20
 }
}
```

A. aws_instance.example.ebs_block_device.[*].volume_id
B. aws_instance.example.ebs_block_device.volume_id
C. aws_instance.example.ebs_block_device[sda2,sda3].volume_id
D. aws_instance.example.ebs_block_device.*.volume_id

Answer: A

Explanation:
https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/device_naming.html

NEW QUESTION 410
- (Exam Topic 4)
Your developers are facing a lot of problem while writing complex expressions involving difficult interpolations . They have to run the terraform plan every time and check whether there are errors , and also check terraform apply to print the value as a temporary output for debugging purposes. What should be done to avoid this?

A. Use terraform console command to have an interactive UI with full access to the underlying terraform state to run your interpolations , and debug at real-time.
B. Add a breakpoint in your code, using the watch keyword , and output the value to console for temporary debugging.
C. Use terraform zipmap function , it will be able to easily do the interpolations without complex code.
D. Use terraform console command to have an interactive UI , but you can only use it with local state , and it does not work with remote state.

Answer: A

Explanation:
The terraform console command provides an interactive console for evaluating expressions. This is useful for testing interpolations before using them in configurations, and for interacting with any values currently saved in state.
https://www.terraform.io/docs/commands/console.html

NEW QUESTION 413
- (Exam Topic 4)
Your company has a lot of workloads in AWS , and Azure that were respectively created using CloudFormation , and AzureRM Templates. However , now your CIO has decided to use Terraform for all new projects , and has asked you to check how to integrate the existing environment with terraform code. What should be your next plan of action?

A. Tell the CIO that this is not possible . Resources created in CloudFormation , and AzureRM templates cannot be tracked using terraform.
B. Use terraform import command to import each resource one by one .
C. This is only possible in Terraform Enterprise , which has the TerraformConverter exe that can take any other template language like AzureRM and convert to Terraform code.
D. Just write the terraform config file for the new resources , and run terraform apply , the state file will automatically be updated with the details of the new resources to be imported.

Answer: B

NEW QUESTION 415
- (Exam Topic 4)
Module version is required to reference a module on the Terraform Module Registry.

A. True
B. False

Answer: B

NEW QUESTION 417
- (Exam Topic 4)
A single terraform resource file that defines an aws_instance resource can simple be renamed to azurerm_virtual_machine in order to switch cloud providers

A. True
B. False

Answer: B

Explanation:
Providers usually require some configuration of their own to specify endpoint URLs, regions, authentication settings.
Providers Initialization can be done by either explicitly via a provider block or by adding a resource from that provide
https://www.terraform.io/docs/configuration/providers.html

NEW QUESTION 421
- (Exam Topic 4)
Which of the following terraform subcommands could be used to remove the lock on the state for the current configuration?

A. Unlock
B. force-unlock
C. Removing the lock on a state file is not possible
D. state-unlock

Answer: B

Explanation:

https://www.terraform.io/docs/commands/force-unlock.html

NEW QUESTION 423
- (Exam Topic 4)
You can reference a resource created with for_each using a Splat (*) expression.

A. True
B. False

Answer: B

Explanation:
Splat Expressions with Maps The splat expression patterns shown above apply only to lists, sets, and tuples. To get a similar result with a map or object value you must use for expressions. Resources that use the for_each argument will appear in expressions as a map of objects, so you can't use splat expressions with those resources. For more information, see Referring to Resource Instances. https://www.terraform.io/language/meta-arguments/for_each#referring-to-instances
https://www.terraform.io/language/expressions/references

NEW QUESTION 424

- (Exam Topic 4)
Which of the following statements about local modules is incorrect:

A. Local modules are not cached by terraform init command
B. Local modules are sourced from a directory on disk
C. Local modules support versions
D. All of the above (all statements above are incorrect
E. None of the above (all statements above are correct)

Answer: C

Explanation:
Version constraints are supported only for modules installed from a module registry, such as the public Terraform Registry or Terraform Cloud's private module registry. Other module sources can provide their own versioning mechanisms within the source string itself, or might not support versions at all. In particular, modules sourced from local file paths do not support version; since they're loaded from the same source repository, they always share the same version as their caller.
https://www.terraform.io/language/modules/syntax

NEW QUESTION 428
- (Exam Topic 4)
You have modified your local Terraform configuration and ran terraform plan to review the changes. Simultaneously, your teammate manually modified the infrastructure component you are working on. Since you already ran terraform plan locally, the execution plan for terraform apply will be the same.

A. True
B. False

Answer: B

NEW QUESTION 432
- (Exam Topic 4)
Your organization has moved to AWS and has manually deployed infrastructure using the console. Recently, a decision has been made to standardize on Terraform for all deployments moving forward.
What can you do to ensure that all existing is managed by Terraform moving forward without interruption to existing services?

A. Submit a ticket to AWS and ask them to export the state of all existing resources and use terraform import to import them into the state file.
B. Delete the existing resources and recreate them using new a Terraform configuration so Terraform can manage them moving forward.
C. Resources that are manually deployed in the AWS console cannot be imported by Terraform.
D. Using terraform import, import the existing infrastructure into your Terraform state.

Answer: D

Explanation:
Terraform is able to import existing infrastructure. This allows us take resources we've created by some other means (i.e. via console) and bring it under Terraform management.
This is a great way to slowly transition infrastructure to Terraform.
The terraform import command is used to import existing infrastructure.
To import a resource, first write a resource block for it in our configuration, establishing the name by which it will be known to Terraform.
Example:

```
resource "aws_instance" "import_example" {
# ...instance configuration...
}
```

Now terraform import can be run to attach an existing instance to this resource configuration.

```
$ terraform import aws_instance.import_example i-03efafa258104165f aws_instance.import_example: Importing from ID "i-03efafa258104165f"...
aws_instance.import_example: Import complete!
Imported aws_instance (ID: i-03efafa258104165f) aws_instance.import_example: Refreshing state... (ID: i-03efafa258104165f) Import successful!
```

The resources that were imported are shown above. These resources are now in your Terraform state and will henceforth be managed by Terraform.
This command locates the AWS instance with ID i-03efafa258104165f (which has been created outside Terraform) and attaches its existing settings, as described by the EC2 API, to the name aws_instance.import_example in the Terraform state.

NEW QUESTION 437
- (Exam Topic 4)
terraform apply will fail if you have not run terraform plan first to update the plan output.

A. True
B. False

Answer: B

NEW QUESTION 438
- (Exam Topic 4)
In order to make a Terraform configuration file dynamic and/or reusable, static values should be converted to use what?

A. Input Parameters
B. Module
C. Regular Expressions
D. Output Value

Answer: A

Explanation:
Input variables serve as parameters for a Terraform module, allowing aspects of the module to be customized without altering the module's own source code, and allowing modules to be shared between different configurations.
https://www.terraform.io/docs/configuration/variables.html

NEW QUESTION 443
- (Exam Topic 4)
Which of the following is not supported backend types in Terra form?

A. consul
B. gcs
C. manta
D. bitbucket

Answer: D

NEW QUESTION 446
- (Exam Topic 4)
In terraform, most resource dependencies are handled automatically. Which of the following statements describes best how terraform resource dependencies are handled?

A. Resource dependencies are identified and maintained in a file called resource.dependencie
B. Each terraform provider is required to maintain a list of all resource dependencies for the provider and it's included with the plugin during initialization when terraform init is execute
C. The file is located in the terraform.d folder.
D. The terraform binary contains a built-in reference map of all defined Terraform resource dependencies.Updates to this dependency map are reflected in terraform version
E. To ensure you are working with thelatest resource dependency map you much be running the latest version of Terraform.
F. Resource dependencies are handled automatically by the depends_on meta_argument, which is set to true by default.
G. Terraform analyses any expressions within a resource block to find references to other objects, and treats those references as implicit ordering requirements when creating, updating, or destroying resources.

Answer: D

Explanation:
https://www.terraform.io/docs/configuration/resources.html

NEW QUESTION 451
- (Exam Topic 4)
Terraform Cloud is more powerful when you integrate it with your version control system (VCS) provider. Select all the supported VCS providers from the answers below. (select four)

A. GitHub
B. CVS Version Control
C. Azure DevOps Server
D. Bitbucket Cloud
E. GitHub Enterprise

Answer: ACDE

Explanation:

Terraform Cloud supports the following VCS providers:
- https://www.terraform.io/docs/cloud/vcs/github.html
- https://www.terraform.io/docs/cloud/vcs/github.html
- https://www.terraform.io/docs/cloud/vcs/github-enterprise.html
- https://www.terraform.io/docs/cloud/vcs/gitlab-com.html
- https://www.terraform.io/docs/cloud/vcs/gitlab-eece.html
- https://www.terraform.io/docs/cloud/vcs/bitbucket-cloud.html
- https://www.terraform.io/docs/cloud/vcs/bitbucket-server.html
- https://www.terraform.io/docs/cloud/vcs/azure-devops-server.html
- https://www.terraform.io/docs/cloud/vcs/azure-devops-services.html https://www.terraform.io/docs/cloud/vcs/index.html#supported-vcs-providers

NEW QUESTION 453
- (Exam Topic 4)
When does Sentinel enforce policy logic during a Terraform Enterprise run?

A. Before the plan phase
B. During the plan phase
C. Before the a apply phase
D. After the apply phase

Answer: C

Explanation:
"Enforcing policy checks on runs - Policies are checked when a run is performed, after the terraform plan but before it can be confirmed or the terraform apply is executed."

NEW QUESTION 455
- (Exam Topic 4)
Which of the following is a meta-argument defined in the configuration files of Terraform?

A. tfvar
B. depends_on
C. instance aws
D. varl

Answer: B

NEW QUESTION 456
- (Exam Topic 4)
In order to reduce the time it takes to provision resources, Terraform uses parallelism. By default, how many resources will Terraform provision concurrently?

A. 5
B. 50
C. 10
D. 20

Answer: C

NEW QUESTION 460
- (Exam Topic 4)
Choose the answer that correctly completes the sentence: _______ backends support state locking.

A. All
B. No
C. Only local
D. Some

Answer: D

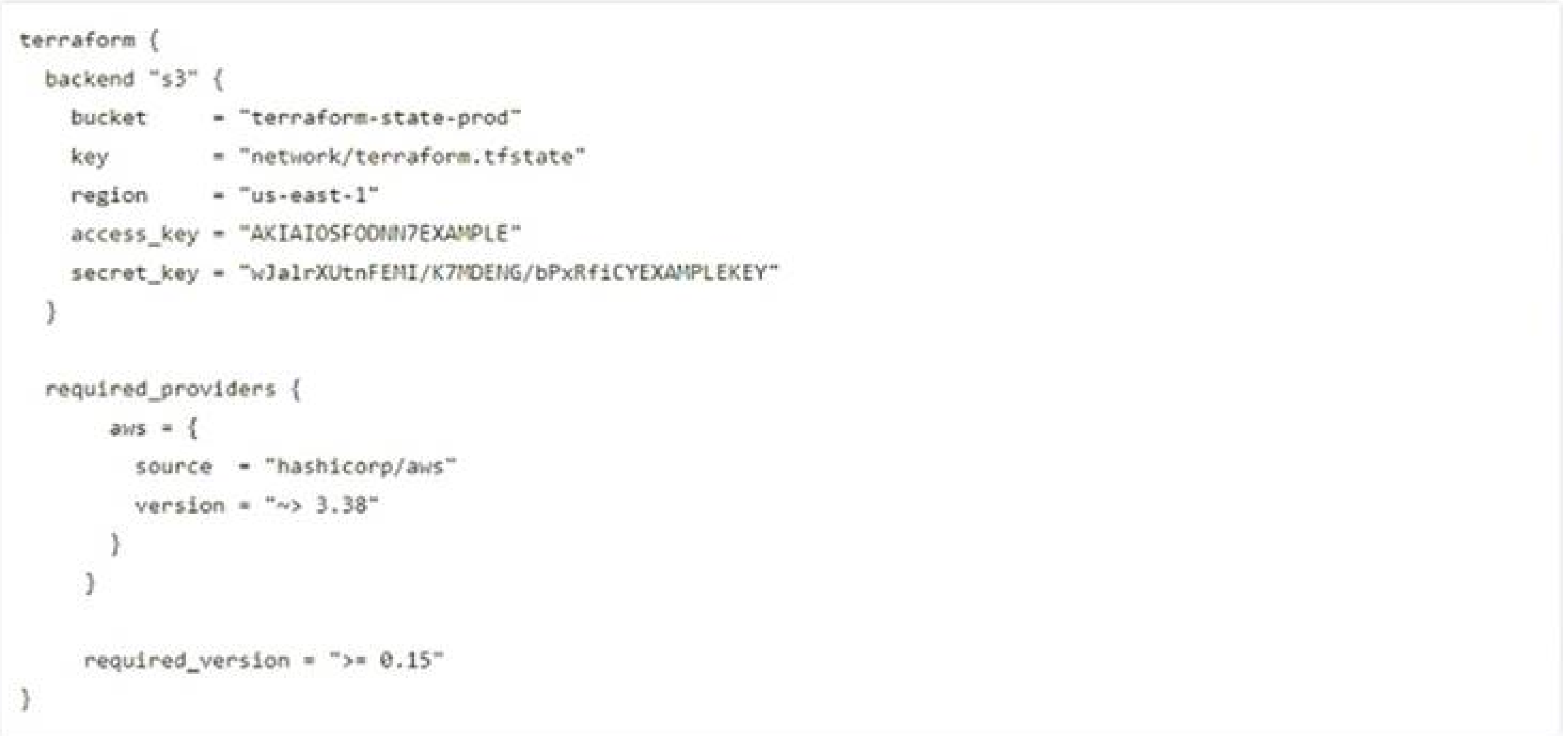
NEW QUESTION 465
- (Exam Topic 4)
While Terraform is generally written using the HashiCorp Configuration Language (HCL), what other syntax can Terraform are expressed in?

A. JSON
B. YAML
C. TypeScript
D. XML

Answer: A

Explanation:
The constructs in the Terraform language can also be expressed in JSON syntax, which is harder for humans to read and edit but easier to generate and parse programmatically.

NEW QUESTION 468
- (Exam Topic 4)
Why does this backend configuration not follow best practices?



```
terraform {
  backend "s3" {
    bucket     = "terraform-state-prod"
    key        = "network/terraform.tfstate"
    region     = "us-east-1"
    access_key = "AKIAIOSFODNN7EXAMPLE"
    secret_key = "wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY"
  }

  required_providers {
       aws = {
         source  = "hashicorp/aws"
         version = "~> 3.38"
       }
     }

     required_version = ">= 0.15"
}
```

A. You should not store credentials in Terraform Configuration
B. You should use the local enhanced storage backend whenever possible
C. An alias meta-argument should be included in backend blocks whenever possible
D. The backend configuration should contain multiple credentials so that more than one user can execute terraform plan and terraform apply

Answer: A

NEW QUESTION 471
- (Exam Topic 4)
You're writing a Terraform configuration that needs to read input from a local file called id_rsa.pub. Which built-in Terraform function can you use to import the file's contents as a string?

A. fileset("id_rsa.pub")
B. filebase64("id_rsa.pub")
C. templatefile("id_rsa.pub")
D. file("id_rsa.pub")

Answer: D

Explanation:
https://www.terraform.io/language/functions/file

NEW QUESTION 472
- (Exam Topic 4)
Which of the following is considered a Terraform plugin?

A. Terraform language
B. Terraform tooling
C. Terraform logic
D. Terraform provider

Answer: D

Explanation:
Terraform is built on a plugin-based architecture. All providers and provisioners that are used in Terraform configurations are plugins, even the core types such as AWS and Heroku. Users of Terraform are able to write new plugins in order to support new functionality in Terraform.
https://www.terraform.io/docs/plugins/basics.html

NEW QUESTION 473
- (Exam Topic 4)
Select the feature below that best completes the sentence:
The following list represents the different types of ______ available in Terraform.
* 1. max
* 2. min
* 3. join
* 4. replace
* 5. list
* 6. length
* 7. range

A. Backends
B. Data sources
C. Named values
D. Functions

Answer: D

Explanation:
The Terraform language includes a number of built-in functions that you can call from within expressions to transform and combine values. The Terraform language does not support user-defined functions, and only the functions built into the language are available for use.
https://www.terraform.io/docs/configuration/functions.html

NEW QUESTION 477
- (Exam Topic 4)
Changing the Terraform backend from the default "local" backend to a different one after doing your first terraform apply is:

A. Mandatory
B. Optional
C. Impossible
D. Discouraged

Answer: B

NEW QUESTION 478
- (Exam Topic 4)
Select all Operating Systems that Terraform is available for. (select five)

A. Linux
B. macOS
C. Unix
D. Solaris
E. Windows
F. FreeBSD

Answer: ABDEF

Explanation:

Terraform is available for macOS, FreeBSD, OpenBSD, Linux, Solaris, Windows https://www.terraform.io/downloads.html

NEW QUESTION 481
- (Exam Topic 4)
What kind of configuration block will create an infrastructure object with settings specified in the block?

A. state
B. provider
C. resource
D. data

Answer: C

NEW QUESTION 482
- (Exam Topic 4)
If a DevOps team adopts AWS Cloud Formation as their standardized method for provisioning public cloud resources, which of the following scenarios poses a challenge for this team?

A. The team is asked to manage a new application stack built on AWS-natrve services
B. The organization decides to expand into Azure and wishes to deploy new infrastructure using their existing codebase
C. The team is asked to build a reusable code base that can deploy resources into any AWS region
D. The DevOps team is tasked with automating a manual provisioning process

Answer: B

NEW QUESTION 485
- (Exam Topic 4)
A "backend" in Terraform determines how state is loaded and how an operation such as apply is executed. Which of the following is not a supported backend type?

A. Terraform enterprise
B. Consul
C. Github
D. S3
E. Artifactory

Answer: C

Explanation:
Github is not a supported backend type. https://www.terraform.io/docs/backends/types/index.html

NEW QUESTION 490
- (Exam Topic 4)
Using multi-cloud and provider-agnostic tools provides which of the following benefits?

A. Operations teams only need to learn and manage a single tool to manage infrastructure, regardless of where the infrastructure is deployed.
B. Increased risk due to all infrastructure relying on a single tool for management.
C. Can be used across major cloud providers and VM hypervisors.
D. Slower provisioning speed allows the operations team to catch mistakes before they are applied.

Answer: AC

Explanation:
Using a tool like Terraform can be advantageous for organizations deploying workloads across multiple public and private cloud environments. Operations teams only need to learn a single tool, single language, and can use the same tooling to enable a DevOps-like experience and workflows.

NEW QUESTION 493
- (Exam Topic 4)
You've used Terraform to deploy a virtual machine and a database. You want to replace this virtual machine instance with an identical one without affecting the database. What is the best way to achieve this using Terraform?

A. Use the Terraform taint command targeting the VMs then run Terraform plan and Terraform apply
B. Delete the Terraform VM resources from your Terraform code then run Terraform plan and terraform apply
C. Use the terraform apply command targeting the VM resources only
D. Use the terraform state rm command to remove the VM from state file

Answer: A

Explanation:
https://www.terraform.io/cli/state/taint

NEW QUESTION 496

- (Exam Topic 4)
You cannot install third party plugins using terraform init.

A. True
B. False

Answer: B

Explanation:
https://www.terraform.io/cli/commands/init
For providers that are published in either the public Terraform Registry or in a third-party provider registry, terraform init will automatically find, download, and install the necessary provider plugins.

NEW QUESTION 499
- (Exam Topic 4)
Terraform plan updates your state file.

A. True
B. False

Answer: B

Explanation:
The terraform plan command creates an execution plan, which lets you preview the changes that Terraform plans to make to your infrastructure. The plan command alone will not actually carry out the proposed changes, and so you can use this command to check whether the proposed changes match what you expected before you apply the changes or share your changes with your team for broader review. Source: https://www.terraform.io/cli/commands/plan

NEW QUESTION 500
- (Exam Topic 4)
How do you specify a module's version when publishing it to the public Terraform Module Registry?

A. The module's configuration page on the Terraform Module Registry
B. Terraform Module Registry does not support versioning modules
C. The release tags in the associated repo Most Voted
D. The module's Terraform code

Answer: C

Explanation:
https://www.terraform.io/registry/modules/publish

NEW QUESTION 504
- (Exam Topic 4)
What does terraform refresh modify?

A. Your cloud infrastructure
B. Your Terraform plan
C. Your state file
D. Your Terraform configuration

Answer: C

NEW QUESTION 509
- (Exam Topic 4)
Which are examples of infrastructure as code? (Choose two.)

A. Cloned virtual machine images
B. Change management database records
C. Versioned configuration files
D. Docker files

Answer: CD

NEW QUESTION 512
- (Exam Topic 4)
You want to share Terraform state with your team, store it securely and provide state locking. How would you do this? Choose three correct answers.

A. Using the consul Terraform backend.
B. Using the remote Terraform backend with Terraform Cloud / Terraform Enterprise.
C. Using the local backend.
D. Using the s3 terraform backen
E. The dynamodb_field option e not needed.
F. Using an s3 terraform backend with an appropriate IAM policy and dynamodb_field option configured.

Answer: ABE

NEW QUESTION 514
- (Exam Topic 4)
What is a downside to using the Vault provider to read secrets from Vault?

A. Secrets are persisted to the state file and plans.
B. Terraform and Vault must be running on the same version.
C. Terraform and Vault must be running on the same physical host.
D. Terraform requires a unique auth method to work with Vault.

Answer: A

Explanation:
The Vault provider allows Terraform to read from, write to, and configure Hashicorp Vault.
Interacting with Vault from Terraform causes any secrets that you read and write to be persisted in both Terraform's state file and in any generated plan files. For any Terraform module that reads or writes Vault secrets, these files should be treated as sensitive and protected accordingly.

NEW QUESTION 515
- (Exam Topic 4)
When do you need to explicitly execute terraform refresh?

A. Before every terraform plan
B. Before every terraform apply
C. Before every terraform import
D. None of the above

Answer: D

Explanation:
Wherever possible, avoid using terraform refresh explicitly and instead rely on Terraform's behavior of automatically refreshing existing objects as part of creating a normal plan. Source: https://www.terraform.io/cli/commands/refresh

NEW QUESTION 519
- (Exam Topic 4)
You need to specify a dependency manually. What resource meta-parameter can you use lo make sure Terraform respects thee dependency?
Type your answer in the field provided. The text field is not case-sensitive and all variations of the correct answer are accepted.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
depends_on

NEW QUESTION 522
- (Exam Topic 4)
Which of the following is true about terraform apply? (Choose two.)

A. It only operates on infrastructure defined in the current working directory or workspace
B. You must pass the output of a terraform plan command to it
C. Depending on provider specification, Terraform may need to destroy and recreate your infrastructure resources
D. By default, it does not refresh your state file to reflect current infrastructure configuration
E. You cannot target specific resources for the operation

Answer: AC

Explanation:
https://www.terraform.io/cli/run

NEW QUESTION 524
- (Exam Topic 4)
Once a new Terraform backend is configured with a Terraform code block, which command(s) is (are) used to migrate the state file?

A. terraform apply
B. terraform push
C. terraform destroy, then terraform apply
D. terraform init

Answer: B

Explanation:
https://www.terraform.io/cli/commands/state/push

NEW QUESTION 528
- (Exam Topic 4)
Which provider authentication method prevents credentials from being stored in the state file?

A. Using environment variables
B. Specifying the login credentials in the provider block
C. Setting credentials as Terraform variables
D. None of the above

Answer: A

NEW QUESTION 530
- (Exam Topic 4)
Which command lets you experiment with Terraform's built-in functions?

A. terraform env
B. terraform console
C. terraform test
D. terraform validate

Answer: B

Explanation:
https://www.terraform.io/cli/commands/console

NEW QUESTION 531
- (Exam Topic 4)
Which type of block fetches or computes information for use elsewhere in a Terraform configuration?

A. provider
B. resource
C. local
D. data

Answer: D

Explanation:
Data sources allow data to be fetched or computed for use elsewhere in Terraform configuration. Use of data sources allows a Terraform configuration to build on information defined outside of Terraform, or defined by another separate Terraform configuration.

NEW QUESTION 533
......

THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual TA-002-P Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the TA-002-P Product From:

https://www.2passeasy.com/dumps/TA-002-P/

Money Back Guarantee

TA-002-P Practice Exam Features:

* TA-002-P Questions and Answers Updated Frequently

* TA-002-P Practice Questions Verified by Expert Senior Certified Staff

* TA-002-P Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* TA-002-P Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year