**TERRAFORM MCQ**

**Which of the following statements accurately describes a Terraform provider?**

a) It manages the lifecycle of infrastructure resources.

b) It is responsible for configuring the Terraform CLI.

c) It only works with cloud providers.

d) It is used for version control of Terraform configurations.

**What is the purpose of a Terraform provider?**

a) To manage Terraform modules

b) To define Terraform variables

c) To interact with APIs of specific infrastructure platforms

d) To handle Terraform state files

**Which of the following is NOT a built-in Terraform provider?**

a) AWS

b) Google Cloud

c) GitHub

d) Azure

**How does Terraform interact with providers?**

a) Through direct CLI commands

b) By making HTTP requests to provider APIs

c) Through provider-specific plugins

d) By modifying Terraform configuration files

**Which Terraform command is used to install provider plugins?**

a) terraform load

b) terraform install

c) terraform init

d) terraform setup

**Which file typically contains provider configurations in a Terraform project?**

a) main.tf

b) vars.tf

c) outputs.tf

d) providers.tf

**Can multiple providers be used within a single Terraform configuration?**

a) No, Terraform only supports one provider per configuration.

b) Yes, but only if they are from the same cloud provider.

c) Yes, Terraform supports multiple providers within a single configuration.

d) Yes, but only if they are from different cloud providers.

**What does the terraform init command do?**

a) Initializes a new Terraform configuration in the current directory.

b) Installs provider plugins and initializes the Terraform working directory.

c) Executes the Terraform plan to create an execution plan.

d) Applies the changes defined in the Terraform configuration to the infrastructure.

**Which command generates an execution plan but does not apply the changes to the infrastructure?**

a) terraform setup

b) terraform validate

c) terraform plan

d) terraform apply

**What does the terraform plan command do?**

a) Initializes the Terraform configuration.

b) Applies the changes to the infrastructure.

c) Generates an execution plan describing what Terraform will do.

d) Validates the syntax of the Terraform configuration files.

**Which command is used to apply the changes described in the execution plan to the infrastructure?**

a) terraform execute

b) terraform change

c) terraform apply

d) terraform deploy

**What is the primary purpose of the terraform apply command?**

a) Validates the Terraform configuration.

b) Generates an execution plan.

c) Applies the changes to the infrastructure.

d) Initializes the Terraform state.

**Which command is used to initialize the backend configuration for storing Terraform state?**

a) terraform setup

b) terraform init

c) terraform configure

d) terraform backend

**Which command is used to upgrade the provider plugins to the latest versions?**

a) terraform update

b) terraform plugin

c) terraform init -upgrade

d) terraform upgrade

**Which command verifies whether the Terraform configuration syntax is valid?**

a) terraform validate

b) terraform check

c) terraform syntax

d) terraform test

**What happens if you run terraform apply without first running terraform plan?**

a) Terraform will prompt you to generate a plan first.

b) Terraform will automatically generate a plan and apply it.

c) Terraform will apply the changes without generating an execution plan.

d) Terraform will display an error and exit.

**Which command is used to clean up and destroy the resources created by Terraform?**

a) terraform clean

b) terraform destroy

c) terraform stop

d) terraform remove

**You have just cloned a Terraform project from a version control repository. Which command will you run first to prepare the project for further configuration and deployment?**

a) terraform configure

b) terraform setup

c) terraform init

d) terraform start

**You've made changes to your Terraform configuration files and want to see what actions Terraform will take when you apply these changes. Which command do you use for this purpose?**

a) terraform validate

b) terraform plan

c) terraform check

d) terraform test

**You're working on a team project where multiple members are contributing to the Terraform configuration. You want to ensure that everyone has the necessary provider plugins installed. Which command do you use to initialize the working directory, including provider plugins?**

a) terraform configure

b) terraform setup

c) terraform init

d) terraform start

**You've run terraform plan and reviewed the execution plan. You're now ready to apply these changes to your infrastructure. Which command will you use to apply the changes?**

a) terraform execute

b) terraform change

c) terraform apply

d) terraform deploy

**You want to add a new provider to your Terraform configuration to manage resources on a different cloud platform. Which file do you typically modify to add provider configurations?**

a) main.tf

b) vars.tf

c) outputs.tf

d) providers.tf

**You're working on a Terraform project that requires updating provider plugins to their latest versions. Which command do you use to update the provider plugins?**

a) terraform update

b) terraform plugin

c) terraform init -upgrade

d) terraform upgrade

**You've completed your work with Terraform and want to destroy all the resources provisioned by your configuration. Which command will you use for cleanup and resource destruction?**

a) terraform clean

b) terraform destroy

c) terraform stop

d) terraform remove