**1. What is Terraform?**

- Tool for infrastructure provisioning

- It allows automate and manage your infrastructure and platform of services

- Open source and declarative

- With Terraform we can create VPC, username and permission on AWS, Azure, other cloud platforms, install docker…

- Managing Infrastructure

- Replicating Infrastructure

**Note:** Ansible is infrastructure configuration tool but Terraform infrastructure provisioning tool

**2. How Terraform Works?**

**-** Terraform has two main components. Terraform Core and Terraform Plugins.

- Input Service: TF-Config and TF-State 🡪 Core 🡪 Providers

**3. What are Modules in Terraform?**

Modules are collections of .tf files containing resources, input variables, and outputs, which exist outside the root folder of your configuration.

**4. What is the Terraform Plugins?**

Terraform Plugins are executable binaries written in Go programming language. Plugins are basically the providers and provisioners in Terraform configurations.

We can modify terraform init ‘s plugin behavior with the following options: -upgrade — Update all previously installed plugins to the newest version that complies with the configuration’s version constraints

**5. What is Execution Plans in Terraform?**

Terraform has a 'planning' step where it generates an execution plan. The execution plan shows what Terraform will do when the call apply. This will avoid any surprises when Terraform manipulates infrastructure.

**6. Define Terraform init?**

The Terraform init is a control that is used to initialize an operational index containing Terraform pattern files. This is the first authority that should be sprint after writing a new Terraform design or cloning an obtainable one from account control. It is safe to lope this control multiple times.

**7. If different teams are working on the same configuration. How do you make files to have syntactically valid and internally consistent?**

terraform validate

This command will check and report errors within modules, attribute names, and value types. Validate your configuration. If your configuration is valid, Terraform will return a success message.

**8. How do you inspect the current state of the infrastructure applied?**

terraform show

When you applied your configuration, Terraform wrote data into a file called terraform.tfstate. This file now contains the IDs and properties of the resources Terraform created so that it can manage or destroy those resources going forward.