1. **Install Terraform on your PC**
2. **Execute all the templates shown in video**
3. **Terraform Init :**

**1.the command used to initialize a Terraform working directory.**

**2.It's the first command that should be run after creating a new Terraform configuration**

**or cloning an existing one.**

**3.This command sets up the environment, downloads necessary provider plugins, and**

**prepares the configuration for use.**

**4.Terraform stores the state of your infrastructure in a backend.**

**5.terraform init sets up this backend, which can be local (a file) or remote**

**(like S3, Azure Blob Storage, or Terraform Cloud).**

**6.It creates a .terraform directory to store downloaded plugins, modules, and other necessary files.**

**7.It will update your env accordingly**

**Terraform Plan :**

**The terraform plan command is used to generate an execution plan, which previews the changes that Terraform will make to your infrastructure based on your configuration.**

**It essentially shows you what will be created, modified, or destroyed without actually applying those changes.**

**This allows you to review the intended changes and ensure they align with your expectations before actually making them.**

**Terraform Apply:**

**terraform apply takes the execution plan generated by terraform plan and makes the actual changes to your infrastructure on the cloud provider.**

**After applying changes, terraform apply updates the state file, which tracks the mapping between your configuration and the real-world resources.**

**terraform apply is run, optionally taking a saved plan file as input, and applies the changes.**

**Terraform Provider:**

**1. provider is a plugin defines and manages resources for a specific cloud or infrastructure platform.**

**2. You configure providers in your Terraform code to interact with the desired infrastructure platform.**

**3. ex of providers -> aws, azure, GCP and many other.**

**4) Integrate a sample Terraform template in jenkins.**