Terraform[Task-06]

**1) Watch terraform-06 video.  
2) Execute the script shown in video.**

**Terraform Modules**

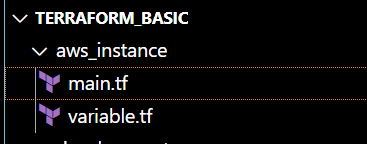
Modules is a collection of configuration files in a directory.

Created a project: Terraform\_basic

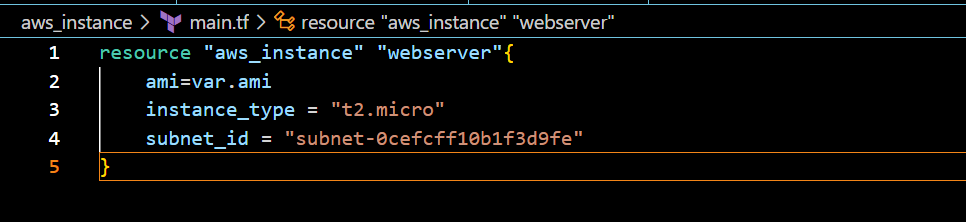
In that project, Created two environments

aws\_instance[Root Module]

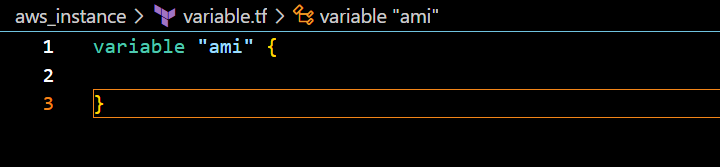
In this created two files,main.tf,variables.tf



In main.tf

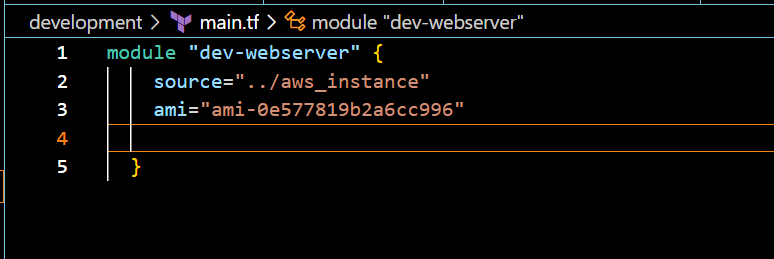


In variables.tf



Another one,development environment

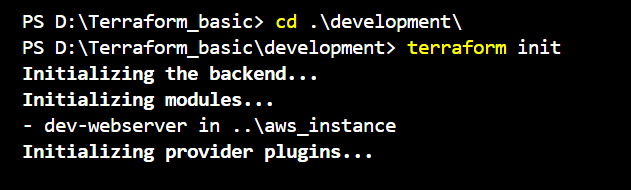
Created a module[in main.tf]



After saving the files,

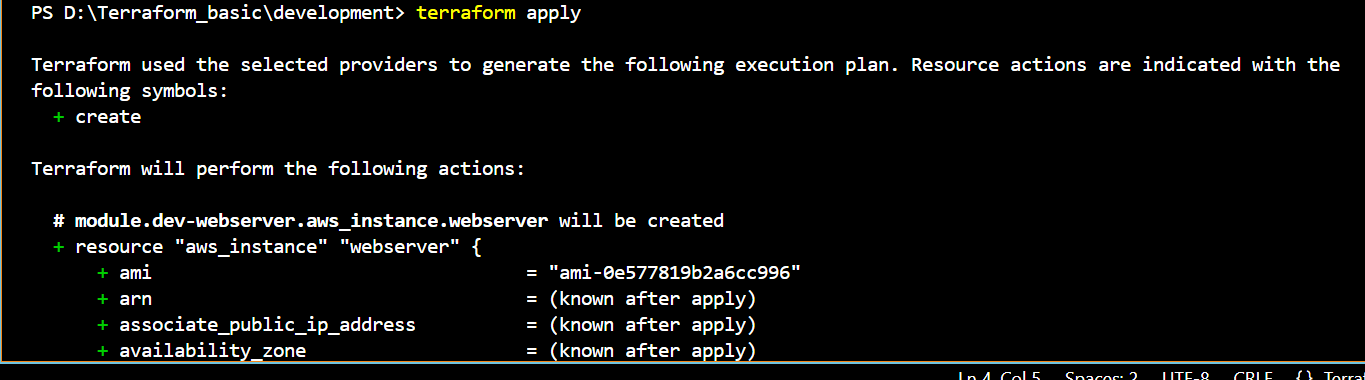
Switching to the development environment

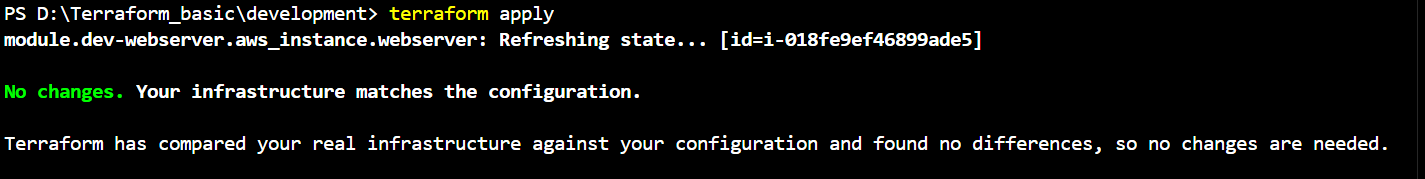
Cd .\development\

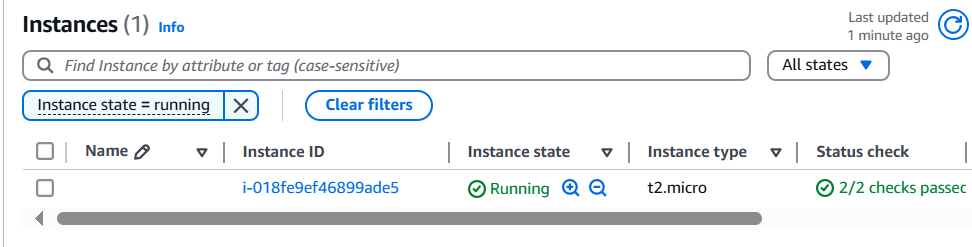


Step:1-terraform init

Step:2-terraform apply



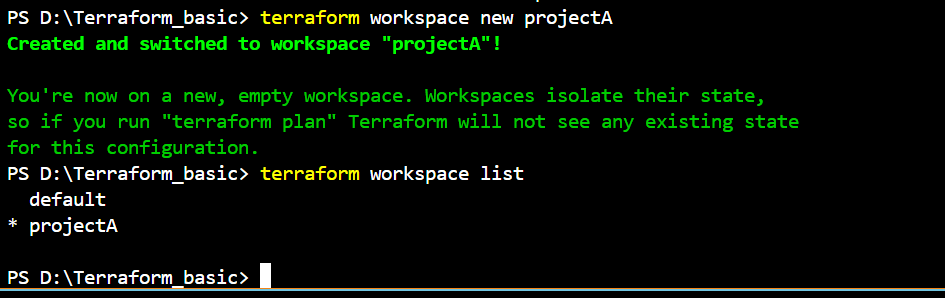




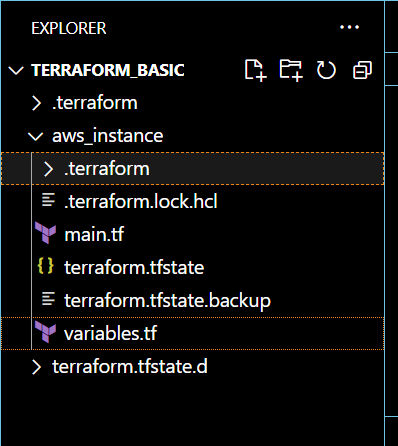
We can also replicate for production environment

**Terraform Workspaces**

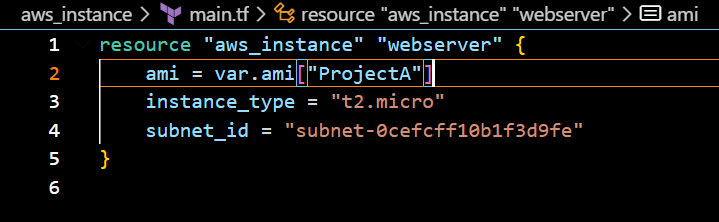
Workspace can be used if we have multiple project/environments using the same configuration.



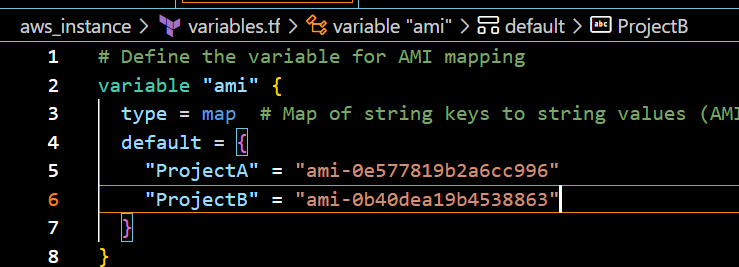
EXAMPLE:



In main.tf

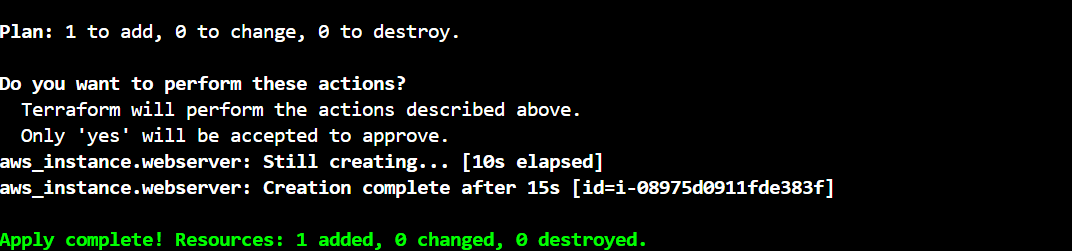


Variable.tf

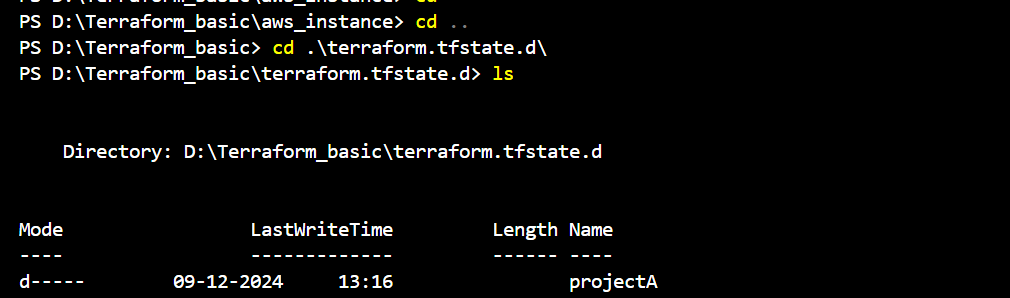


Terraform init

Terraform apply



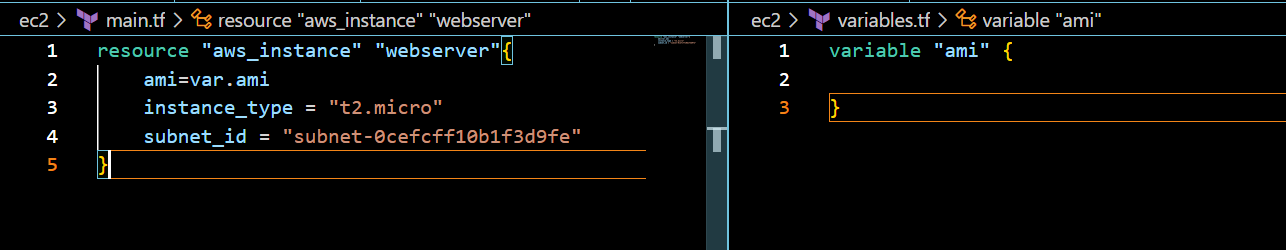
Final output



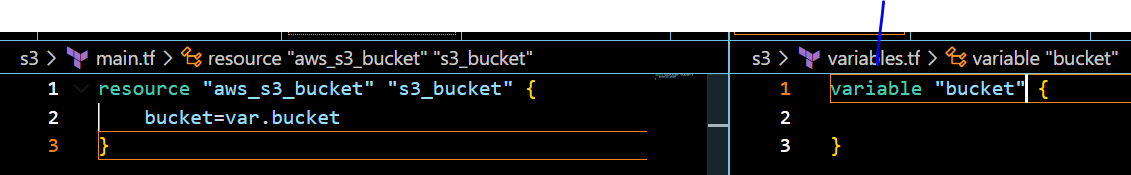
**3) Provision ec2, s3 and vpc using Terraform modules.**

Created the ec2,s3,vps [main.tf,variables.tf files]

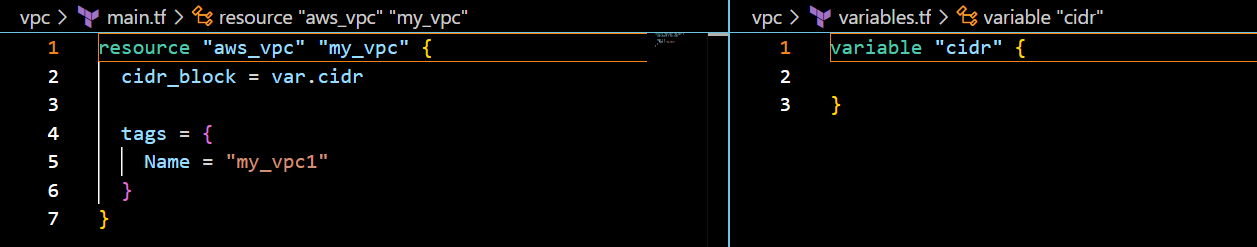
Ec2.



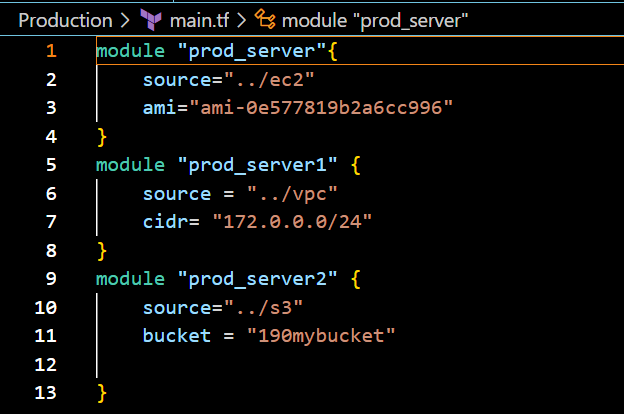
**S3**



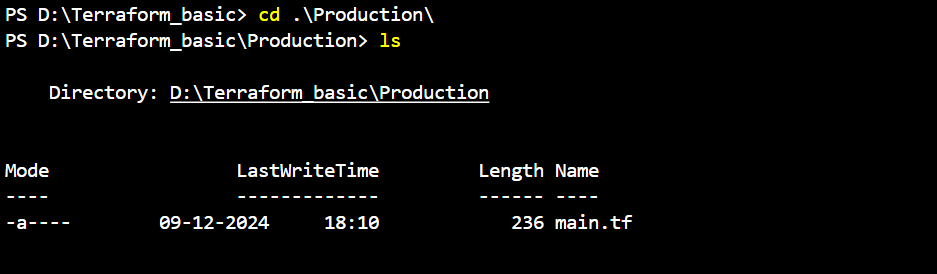
**Vpc**

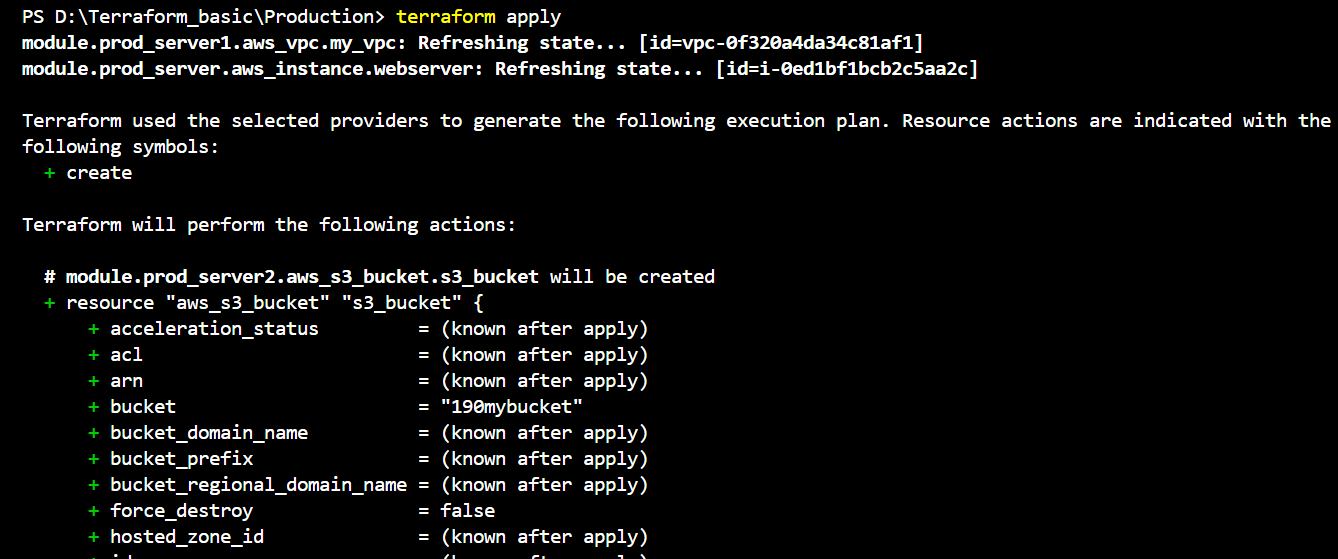


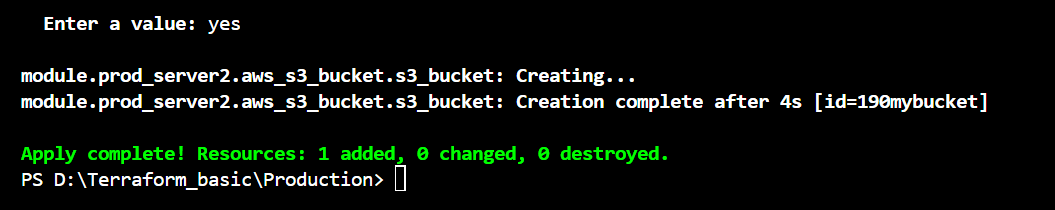
**Creating a module**



**Execution**

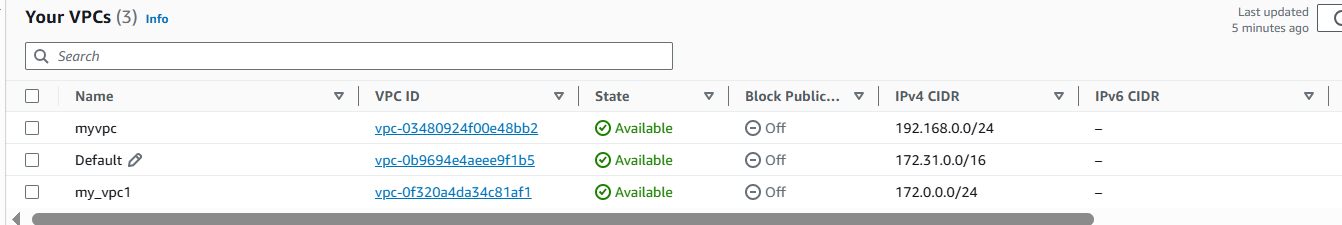




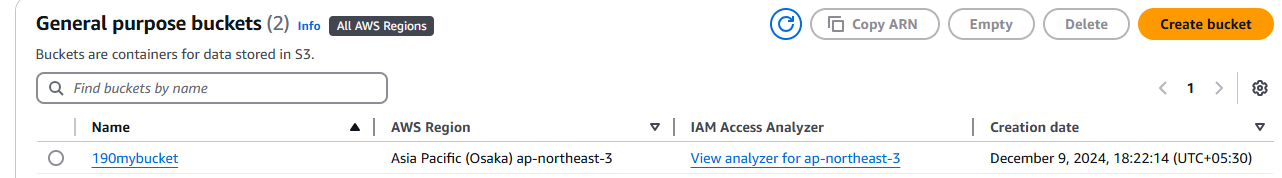


**Outputs of console**

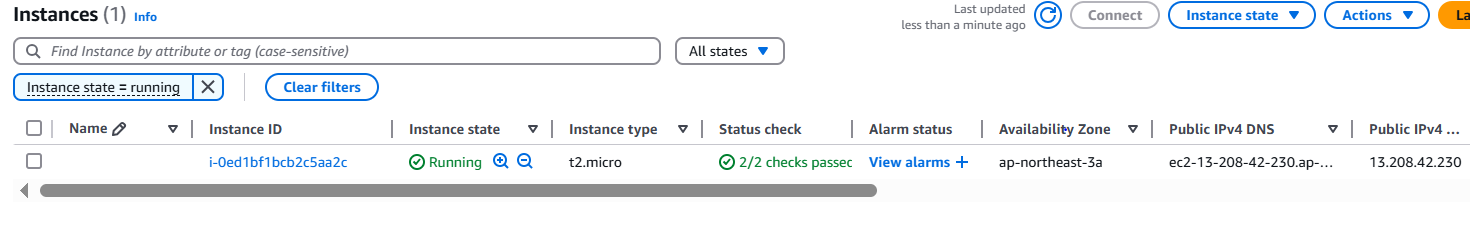
**VPC[my-vpc1]**



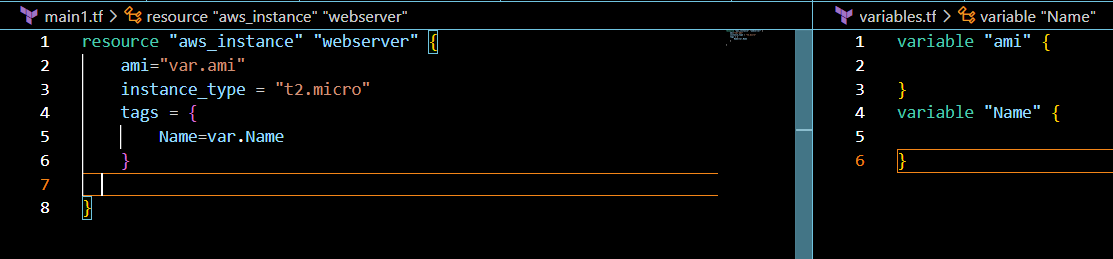
**S3**



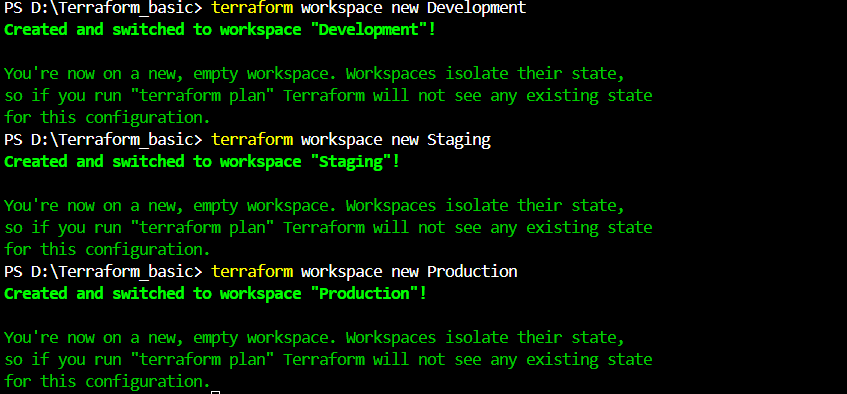
**Ec2**



**4) Provision ec2 for 3 different environments (Dev, Staging and Prod) using terraform workspaces.**



Creating 3 different environments using workspace

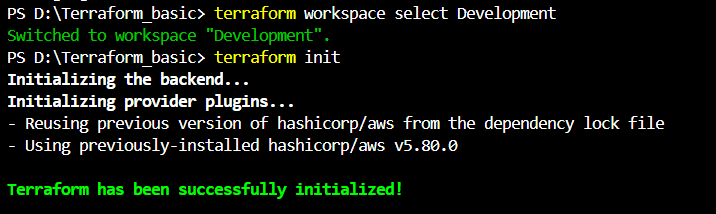


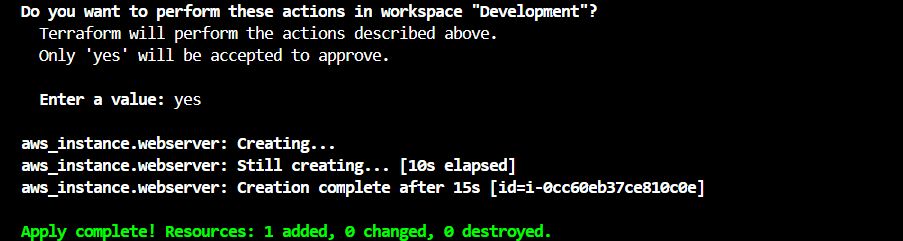
Checking the list of environments[workspaces]available

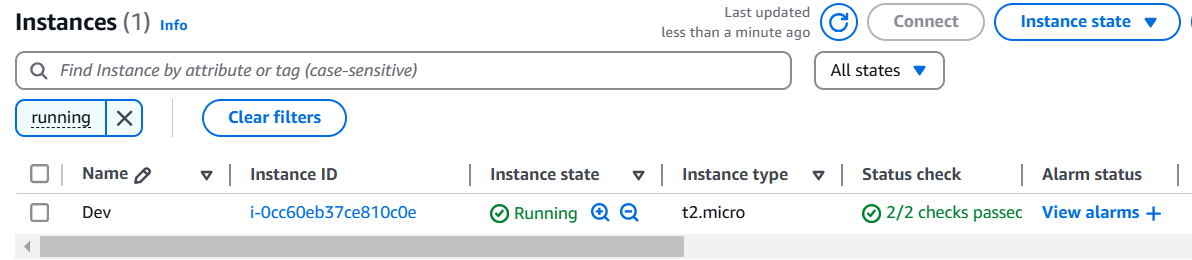
With the command

:terraform workspace list

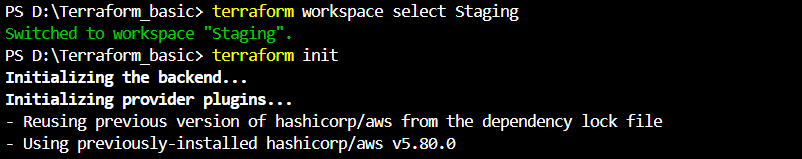
**Switching to the dev environment**

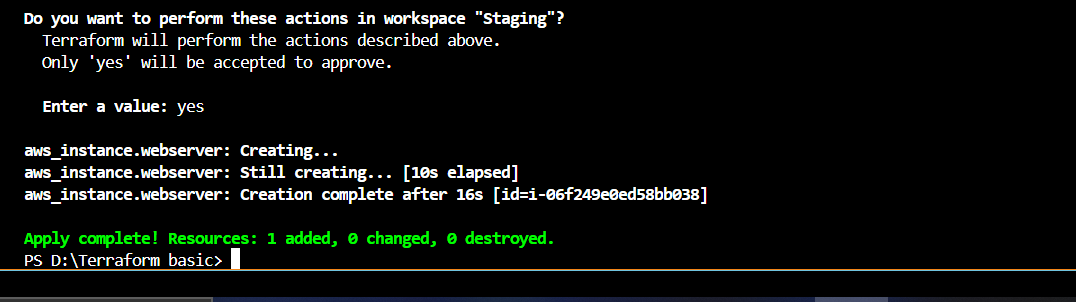


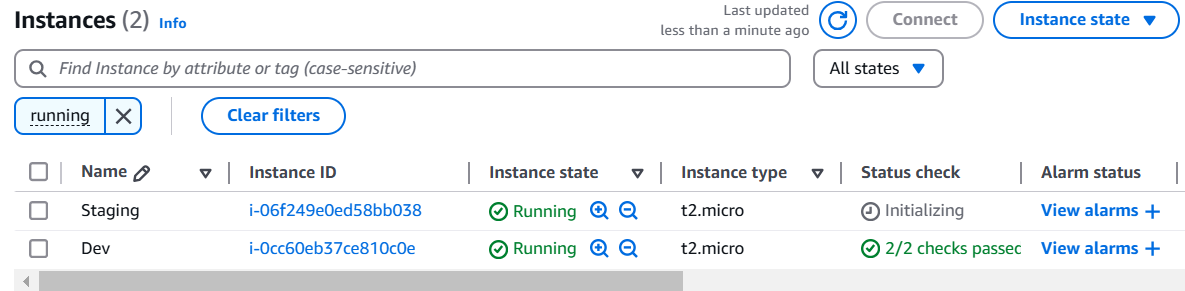




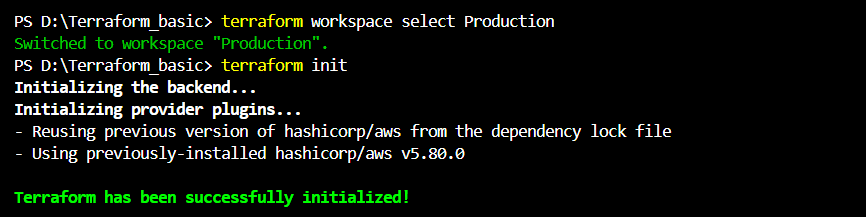
**Switching to the Staging environment**

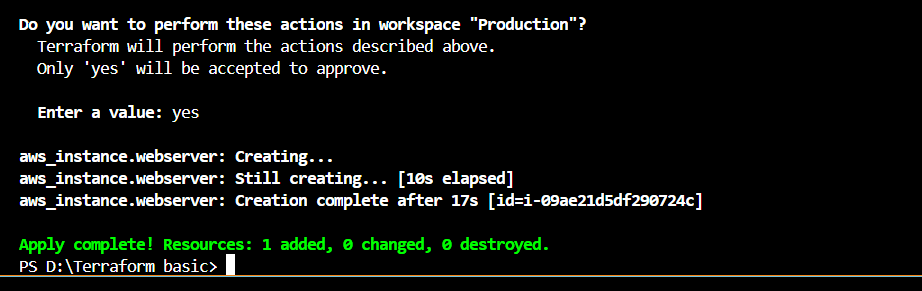


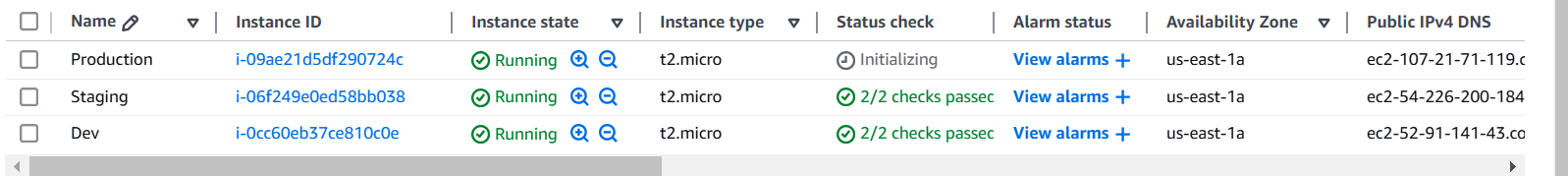




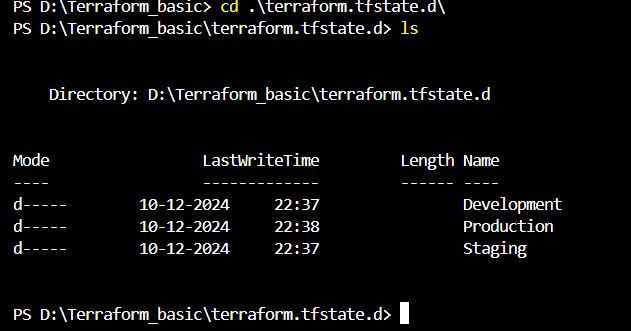
**Switching to the Production environment**







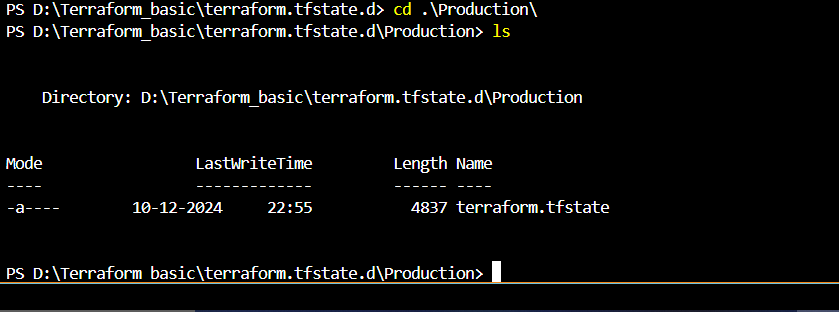
**The state files of these workspaces infra is created in  
“terraform.tfstate.d”**



**In each workspace its statefile is present – development  
workspace statefile**



**In each workspace its statefile is present – Production workspace statefile**



**In each workspace its statefile is present – Staging  
workspace statefile**

