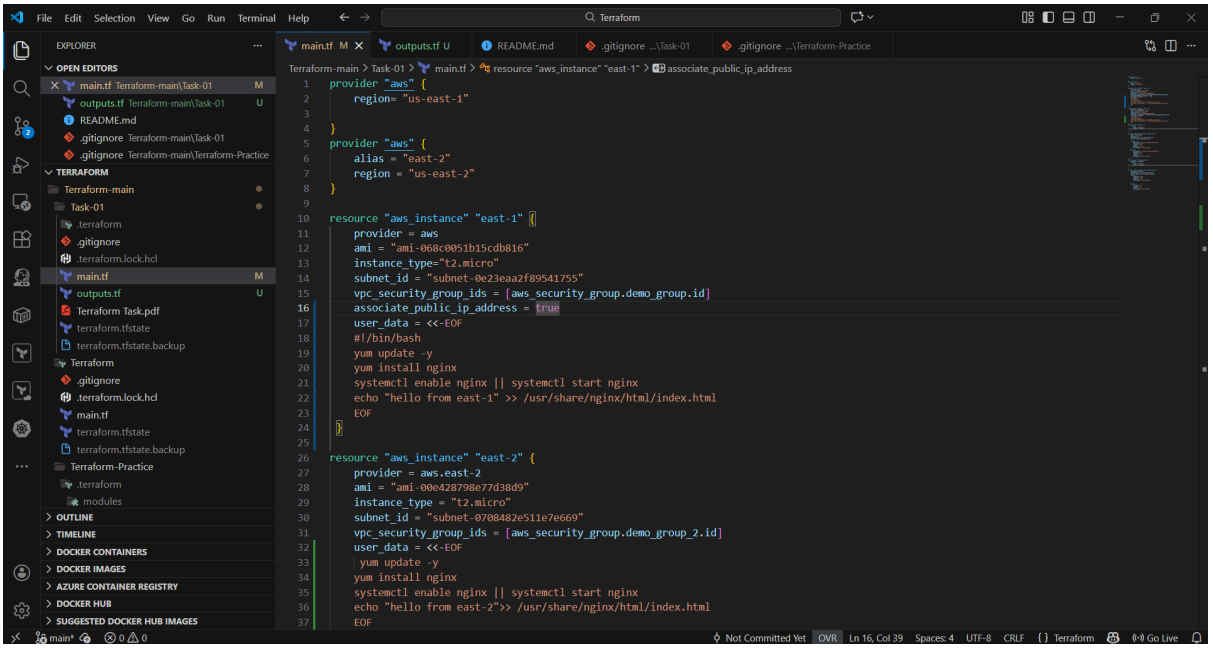
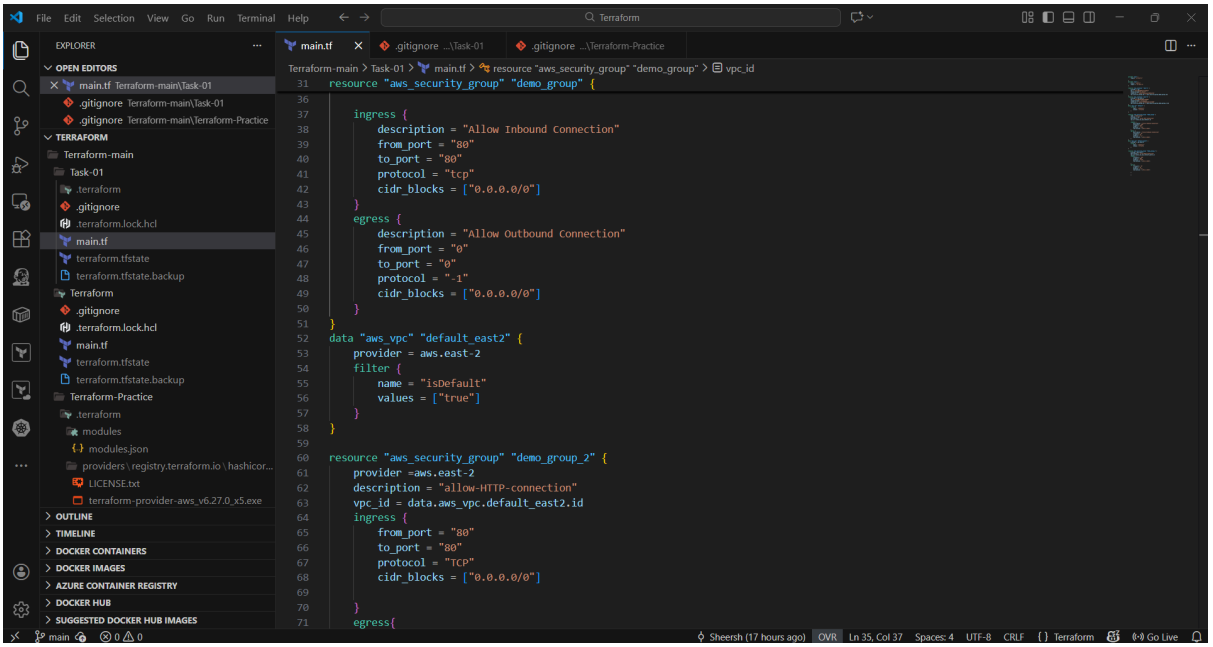
Terraform Task-2

Task Description:

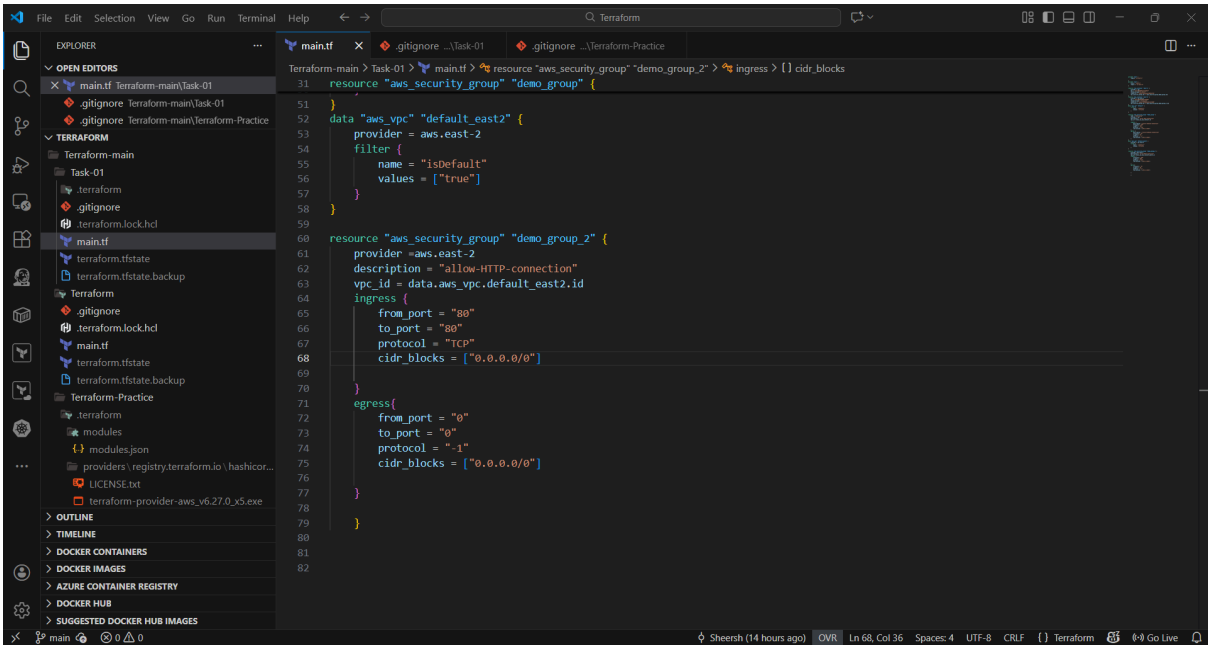
Create 2 EC2 instances on 2 different regions and install nginx using terraform script.



```
provider "aws" {
    region= "us-east-1"

}
provider "aws" {
    alias = "east-2"
    region = "us-east-2"
}

resource "aws_instance" "east-1" {
    provider = aws
    ami = "ami-068c0051b15cdb816"
    instance_type="t2.micro"
    subnet_id = "subnet-0e23eaa2f89541755"
    vpc_security_group_ids = [aws_security_group.demo_group.id]
    associate_public_ip_address = true
    user_data = <<-EOF
    #!/bin/bash
    yum update -y
    yum install nginx
    systemctl enable nginx || systemctl start nginx
    echo "hello from east-1" >> /usr/share/nginx/html/index.html
    EOF
}

resource "aws_instance" "east-2" {
    provider = aws.east-2
    ami = "ami-00e428798e77d38d9"
    instance_type = "t2.micro"
    subnet_id = "subnet-0708482e511e7e669"
    vpc_security_group_ids = [aws_security_group.demo_group_2.id]
    user_data = <<-EOF
     yum update -y
    yum install nginx
    systemctl enable nginx || systemctl start nginx
    echo "hello from east-2">> /usr/share/nginx/html/index.html
    EOF
```



```
resource "aws_security_group" "demo_group" {

    ingress {
        description = "Allow Inbound Connection"
        from_port = "80"
        to_port = "80"
        protocol = "tcp"
        cidr_blocks = ["0.0.0.0/0"]
    }
    egress {
        description = "Allow Outbound Connection"
        from_port = "0"
        to_port = "0"
        protocol = "-1"
        cidr_blocks = ["0.0.0.0/0"]
    }
}
data "aws_vpc" "default_east2" {
    provider = aws.east-2
    filter {
        name = "isDefault"
        values = ["true"]
    }
}

resource "aws_security_group" "demo_group_2" {
    provider =aws.east-2
    description = "allow-HTTP-connection"
    vpc_id = data.aws_vpc.default_east2.id
    ingress {
        from_port = "80"
        to_port = "80"
        protocol = "TCP"
        cidr_blocks = ["0.0.0.0/0"]

    }
    egress{
```




```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform init
Initializing the backend...
Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v6.27.0

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform plan
data.aws_vpc.default_east2: Reading...
data.aws_vpc.default: Reading...
data.aws_vpc.default: Read complete after 3s [id=vpc-0ae7812b140652a61]
data.aws_vpc.default_east2: Read complete after 4s [id=vpc-0ab7e69dc4ef5f6d8]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
  + create

Terraform will perform the following actions:

  # aws_instance.east-1 will be created
  + resource "aws_instance" "east-1" {
      + ami                                  = "ami-068c0051b15cdb816"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + enable_primary_ipv6                  = (known after apply)
      + force_destroy                        = false
```

```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform plan
  # aws_instance.east-1 will be created
  + resource "aws_instance" "east-1" {
      + ami                                  = "ami-068c0051b15cdb816"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + enable_primary_ipv6                  = (known after apply)
      + force_destroy                        = false
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)
      + instance_initiated_shutdown_behavior = (known after apply)
      + instance_lifecycle                   = (known after apply)
      + instance_state                       = (known after apply)
      + instance_type                        = "t2.micro"
      + ipv6_address_count                   = (known after apply)
      + ipv6_addresses                       = (known after apply)
      + key_name                             = (known after apply)
      + monitoring                           = (known after apply)
      + outpost_arn                          = (known after apply)
      + password_data                        = (known after apply)
      + placement_group                      = (known after apply)
      + placement_group_id                   = (known after apply)
      + placement_partition_number           = (known after apply)
      + primary_network_interface_id         = (known after apply)
      + private_dns                          = (known after apply)
      + private_ip                           = (known after apply)
      + public_dns                           = (known after apply)
      + public_ip                            = (known after apply)
      + region                               = "us-east-1"
      + secondary_private_ips                = (known after apply)
```

```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform plan
      + placement_partition_number           = (known after apply)
      + primary_network_interface_id         = (known after apply)
      + private_dns                          = (known after apply)
      + private_ip                           = (known after apply)
      + public_dns                           = (known after apply)
      + public_ip                            = (known after apply)
      + region                               = "us-east-1"
      + secondary_private_ips                = (known after apply)
      + security_groups                      = (known after apply)
      + source_dest_check                    = true
      + spot_instance_request_id             = (known after apply)
      + subnet_id                            = "subnet-0e23eaa2f89541755"
      + tags_all                             = (known after apply)
      + tenancy                              = (known after apply)
      + user_data_base64                     = (known after apply)
      + user_data_replace_on_change          = false
      + vpc_security_group_ids               = (known after apply)

      + capacity_reservation_specification (known after apply)

      + cpu_options (known after apply)

      + ebs_block_device (known after apply)

      + enclave_options (known after apply)

      + ephemeral_block_device (known after apply)

      + instance_market_options (known after apply)

      + maintenance_options (known after apply)

      + metadata_options (known after apply)

      + network_interface (known after apply)
```

```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform plan
  # aws_instance.east-2 will be created
  + resource "aws_instance" "east-2" {
      + ami                                  = "ami-00e428798e77d38d9"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + enable_primary_ipv6                  = (known after apply)
      + force_destroy                        = false
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)
      + instance_initiated_shutdown_behavior = (known after apply)
      + instance_lifecycle                   = (known after apply)
      + instance_state                       = (known after apply)
      + instance_type                        = "t2.micro"
      + ipv6_address_count                   = (known after apply)
      + ipv6_addresses                       = (known after apply)
      + key_name                             = (known after apply)
      + monitoring                           = (known after apply)
      + outpost_arn                          = (known after apply)
      + password_data                        = (known after apply)
      + placement_group                      = (known after apply)
      + placement_group_id                   = (known after apply)
      + placement_partition_number           = (known after apply)
      + primary_network_interface_id         = (known after apply)
      + private_dns                          = (known after apply)
      + private_ip                           = (known after apply)
      + public_dns                           = (known after apply)
      + public_ip                            = (known after apply)
      + region                               = "us-east-2"
      + secondary_private_ips                = (known after apply)
```

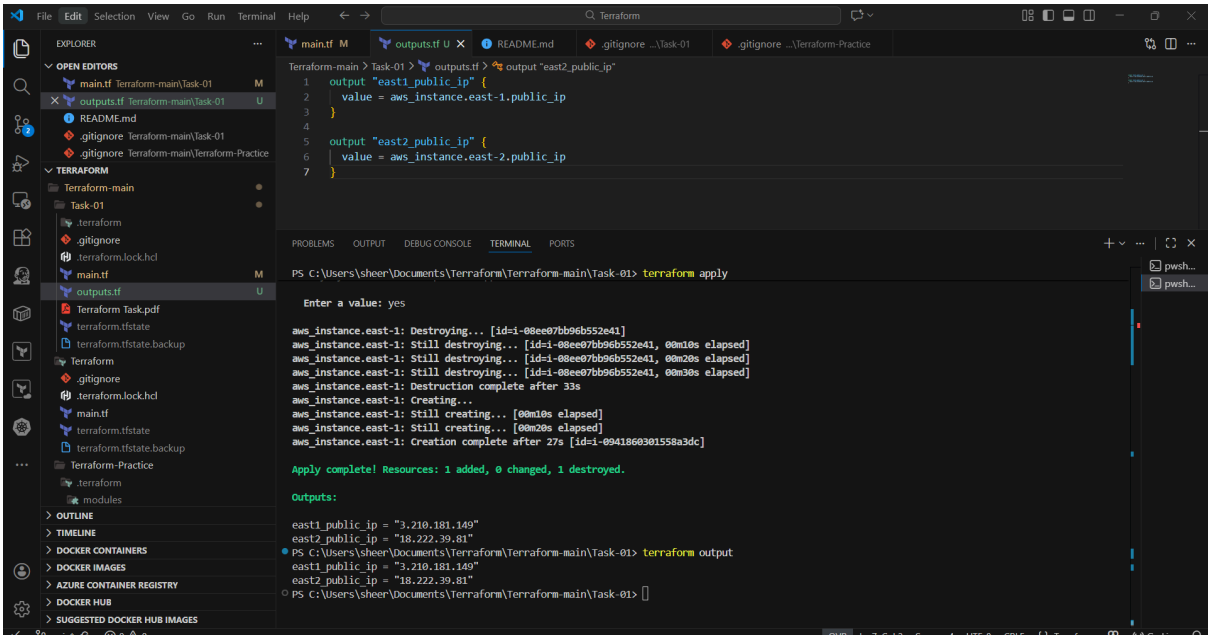
```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform plan
            + prefix_list_ids  = []
            + protocol         = "-1"
            + security_groups  = []
            + self             = false
            + to_port          = 0
              # (1 unchanged attribute hidden)
          },
        ]
      + id                     = (known after apply)
      + ingress                = [
          + {
            + cidr_blocks      = [
                + "0.0.0.0/0",
              ]
            + from_port        = 80
            + ipv6_cidr_blocks = []
            + prefix_list_ids  = []
            + protocol         = "tcp"
            + security_groups  = []
            + self             = false
            + to_port          = 80
              # (1 unchanged attribute hidden)
          },
        ]
      + name                   = (known after apply)
      + name_prefix            = (known after apply)
      + owner_id               = (known after apply)
      + region                 = "us-east-2"
      + revoke_rules_on_delete = false
      + tags_all               = (known after apply)
      + vpc_id                 = "vpc-0ab7e69dc4ef5f6d8"
    }

Plan: 4 to add, 0 to change, 0 to destroy.
```

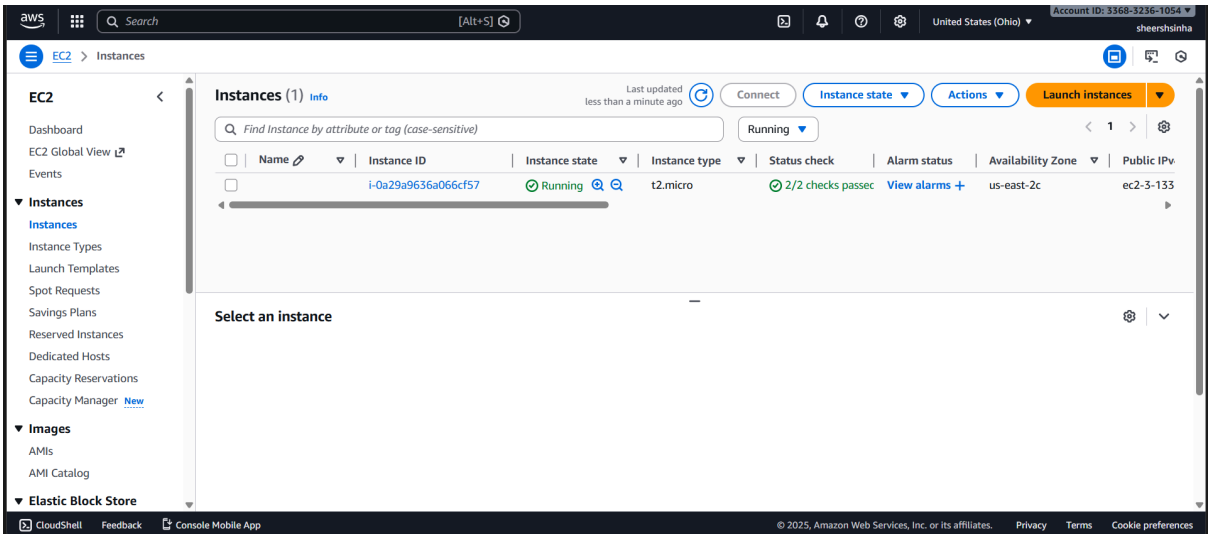
```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform apply
data.aws_vpc.default_east2: Reading...
data.aws_vpc.default: Reading...
data.aws_vpc.default_east2: Read complete after 3s [id=vpc-0ab7e69dc4ef5f6d8]
data.aws_vpc.default: Read complete after 3s [id=vpc-0ae7812b140652a61]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
  + create

Terraform will perform the following actions:

  # aws_instance.east-1 will be created
  + resource "aws_instance" "east-1" {
      + ami                                  = "ami-068c0051b15cdb816"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + enable_primary_ipv6                  = (known after apply)
      + force_destroy                        = false
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)
      + instance_initiated_shutdown_behavior = (known after apply)
      + instance_lifecycle                   = (known after apply)
      + instance_state                       = (known after apply)
      + instance_type                        = "t2.micro"
      + ipv6_address_count                   = (known after apply)
      + ipv6_addresses                       = (known after apply)
      + key_name                             = (known after apply)
      + monitoring                           = (known after apply)
      + outpost_arn                          = (known after apply)
```

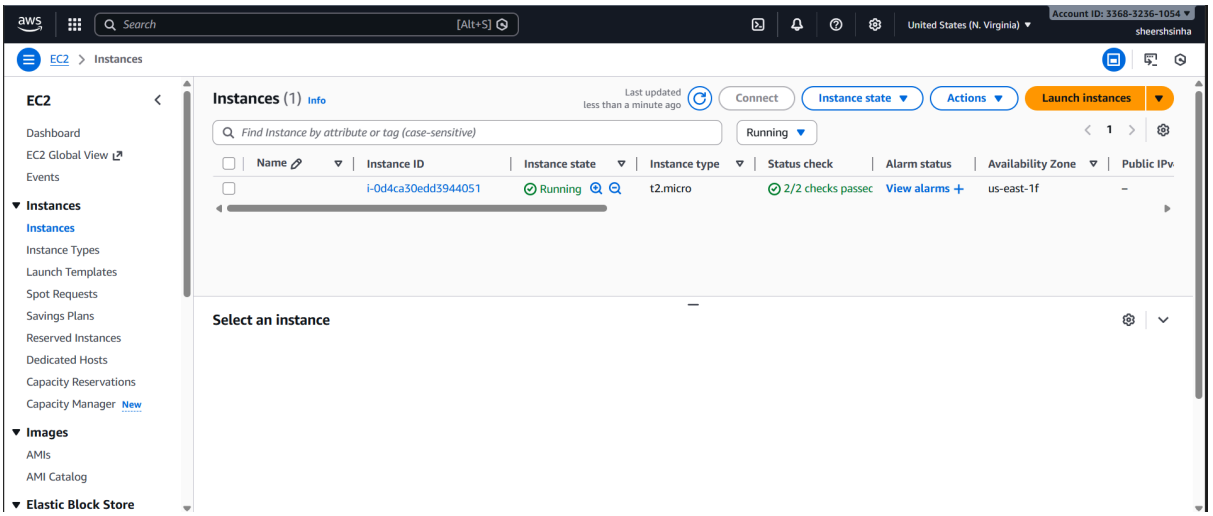
```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform apply
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)
      + instance_initiated_shutdown_behavior = (known after apply)
      + instance_lifecycle                   = (known after apply)
      + instance_state                       = (known after apply)
      + instance_type                        = "t2.micro"
      + ipv6_address_count                   = (known after apply)
      + ipv6_addresses                       = (known after apply)
      + key_name                             = (known after apply)
      + monitoring                           = (known after apply)
      + outpost_arn                          = (known after apply)
      + password_data                        = (known after apply)
      + placement_group                      = (known after apply)
      + placement_group_id                   = (known after apply)
      + placement_partition_number           = (known after apply)
      + primary_network_interface_id         = (known after apply)
      + private_dns                          = (known after apply)
      + private_ip                           = (known after apply)
      + public_dns                           = (known after apply)
      + public_ip                            = (known after apply)
      + region                               = "us-east-1"
      + secondary_private_ips                = (known after apply)
      + security_groups                      = (known after apply)
      + source_dest_check                    = true
      + spot_instance_request_id             = (known after apply)
      + subnet_id                            = "subnet-0e23eaa2f89541755"
      + tags_all                             = (known after apply)
      + tenancy                              = (known after apply)
      + user_data_base64                     = (known after apply)
      + user_data_replace_on_change          = false
      + vpc_security_group_ids               = (known after apply)

      + capacity_reservation_specification (known after apply)
```

```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform apply
      + owner_id              = (known after apply)
      + region                = "us-east-2"
      + revoke_rules_on_delete = false
      + tags_all              = (known after apply)
      + vpc_id                = "vpc-0ab7e69dc4ef5f6d8"
    }

Plan: 4 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

aws_security_group.demo_group_2: Creating...
aws_security_group.demo_group: Creating...
aws_security_group.demo_group_2: Creation complete after 7s [id=sg-008048ddb6b5a41a2]
aws_instance.east-2: Creating...
aws_security_group.demo_group: Creation complete after 7s [id=sg-0e979d2d86a528221]
aws_instance.east-1: Creating...
aws_instance.east-2: Still creating... [00m10s elapsed]
aws_instance.east-1: Still creating... [00m10s elapsed]
aws_instance.east-2: Still creating... [00m20s elapsed]
aws_instance.east-1: Still creating... [00m20s elapsed]
aws_instance.east-1: Creation complete after 26s [id=i-0d4ca30edd3944051]
aws_instance.east-2: Still creating... [00m30s elapsed]
aws_instance.east-2: Creation complete after 36s [id=i-0a29a9636a066cf57]

Apply complete! Resources: 4 added, 0 changed, 0 destroyed.
```

```
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform apply

  Enter a value: yes

aws_instance.east-1: Destroying... [id=i-08ee07bb96b552e41]
aws_instance.east-1: Still destroying... [id=i-08ee07bb96b552e41, 00m10s elapsed]
aws_instance.east-1: Still destroying... [id=i-08ee07bb96b552e41, 00m20s elapsed]
aws_instance.east-1: Still destroying... [id=i-08ee07bb96b552e41, 00m30s elapsed]
aws_instance.east-1: Destruction complete after 33s
aws_instance.east-1: Creating...
aws_instance.east-1: Still creating... [00m10s elapsed]
aws_instance.east-1: Still creating... [00m20s elapsed]
aws_instance.east-1: Creation complete after 27s [id=i-0941860301558a3dc]

Apply complete! Resources: 1 added, 0 changed, 1 destroyed.

Outputs:

east1_public_ip = "3.210.181.149"
east2_public_ip = "18.222.39.81"
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform output
east1_public_ip = "3.210.181.149"
east2_public_ip = "18.222.39.81"
```


main.tf M
outputs.tf U
README.md
.gitignore ...\Task-01
.gitignore ...\Terraform-Practice
output "east1_public_ip" {
value = aws_instance.east-1.public_ip
}
output "east2_public_ip" {
value = aws_instance.east-2.public_ip
}
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform apply
Enter a value: yes
aws_instance.east-1: Destroying... [id=i-08ee07bb96b552e41]
aws_instance.east-1: Still destroying... [id=i-08ee07bb96b552e41, 00m10s elapsed]
aws_instance.east-1: Still destroying... [id=i-08ee07bb96b552e41, 00m20s elapsed]
aws_instance.east-1: Still destroying... [id=i-08ee07bb96b552e41, 00m30s elapsed]
aws_instance.east-1: Destruction complete after 33s
aws_instance.east-1: Creating...
aws_instance.east-1: Still creating... [00m10s elapsed]
aws_instance.east-1: Still creating... [00m20s elapsed]
aws_instance.east-1: Creation complete after 27s [id=i-0941860301558a3dc]
Apply complete! Resources: 1 added, 0 changed, 1 destroyed.
Outputs:
east1_public_ip = "3.210.181.149"
east2_public_ip = "18.222.39.81"
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01> terraform output
east1_public_ip = "3.210.181.149"
east2_public_ip = "18.222.39.81"
PS C:\Users\sheer\Documents\Terraform\Terraform-main\Task-01>


United States (Ohio)
Account ID: 3368-3236-1054
sheershsinha
EC2 > Instances
Instances (1) Info
Last updated less than a minute ago
Connect
Instance state
Actions
Launch instances
Running
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv
i-0a29a9636a066cf57
Running
t2.micro
2/2 checks passec
View alarms
us-east-2c
ec2-3-133
Select an instance
CloudShell
Feedback
Console Mobile App
© 2025, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences


United States (N. Virginia)
Account ID: 3368-3236-1054
sheershsinha
EC2 > Instances
Instances (1) Info
Last updated less than a minute ago
Connect
Instance state
Actions
Launch instances
Running
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv
i-0d4ca30edd3944051
Running
t2.micro
2/2 checks passec
View alarms
us-east-1f
Select an instance