#############PROVIDER BLOCK.tf

provider "aws" {

region = "us-east-2"

}

###########Creating VPC (main block.tf)

resource "aws\_vpc" "my\_vpc" {

cidr\_block = "10.0.0.0/16"

tags = {

Name = "my\_vpc"

}

}

resource "aws\_subnet" "my\_subnet" {

vpc\_id = aws\_vpc.my\_vpc.id

cidr\_block = "10.0.1.0/24"

availability\_zone = "us-east-2a"

tags = {

Name = "my\_subnet"

}

}

# Create a Security Group

resource "aws\_security\_group" "my\_sg" {

vpc\_id = aws\_vpc.my\_vpc.id

ingress {

from\_port = 22

to\_port = 22

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

}

egress {

from\_port = 0

to\_port = 0

protocol = "-1"

cidr\_blocks = ["0.0.0.0/0"]

}

tags = {

Name = "my\_security\_group"

}

}

############Creating The instance

resource "aws\_instance" "my\_instance" {

ami = "ami-085f9c64a9b75eed5" # Replace with your desired AMI ID

instance\_type = "t2.micro"

subnet\_id = aws\_subnet.my\_subnet.id

vpc\_security\_group\_ids = [aws\_security\_group.my\_sg.id]

tags = {

Name = "my\_instance"

}

}

############ Output the EC2 instance ID(Output block.tf)

output "instance\_id" {

value = aws\_instance.my\_instance.id

}





