resource "aws\_vpc" "gfg-vpc" {

  cidr\_block = "10.0.0.0/16"

}

resource "aws\_subnet" "gfg-subnet" {

  vpc\_id     = aws\_vpc.gfg-vpc.id

  cidr\_block = "10.0.1.0/24"

  tags = {

    Name = "gfg-subnet"

  }

}

resource "aws\_internet\_gateway" "gfg-igw" {

  vpc\_id = aws\_vpc.gfg-vpc.id

  tags = {

    Name = "gfg-igw"

  }

}

resource "aws\_route\_table" "gfg-tb" {

  vpc\_id = aws\_vpc.gfg-vpc.id

  route {

    cidr\_block = "0.0.0.0/0"

    gateway\_id = aws\_internet\_gateway.gfg-igw.id

  }

  tags = {

    Name = "gfg-tb"

  }

}

resource "aws\_route\_table\_association" "a" {

  subnet\_id      = aws\_subnet.gfg-subnet.id

  route\_table\_id = aws\_route\_table.gfg-tb.id

}

resource "aws\_security\_group" "gfg-sg" {

  name        = "gfg-sg"

  description = "Allow TLS inbound traffic"

  vpc\_id      = aws\_vpc.gfg-vpc.id

  ingress {

    description      = "TLS from VPC"

    from\_port        = 20

    to\_port          = 20

    protocol         = "tcp"

    cidr\_blocks      = ["0.0.0.0/0"]

    ipv6\_cidr\_blocks = ["::/0"]

  }

  egress {

    from\_port        = 0

    to\_port          = 0

    protocol         = "-1"

    cidr\_blocks      = ["0.0.0.0/0"]

    ipv6\_cidr\_blocks = ["::/0"]

  }

  tags = {

    Name = "gfg-sg"

  }

}

resource "aws\_instance" "my-vpc-instance" {

    ami = "ami-078efad6f7ec18b8a"

    instance\_type = "t2.micro"

    subnet\_id = aws\_subnet.gfg-subnet.id

    vpc\_security\_group\_ids = [aws\_security\_group.gfg-sg.id]

    tags = {

      Name = "my-vpc-instance"

    }

}