Terraform project

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Create an AWS vpc and a subnet on it

Create a internetgateway and route tables,associate the route table to subnet

Create a security group with inbound and outbound rules and create an AWS ubuntu

instance on the above subnet,assign public ips and also a pem key.

provider "aws" {

region = "ap-south-1"

access\_key = "AKIAS43BASASCOFOPNNZ"

secret\_key = "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"

}

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

cidr\_block = "10.0.0.0/24"

tags = {

Name = "myvpc"

}

}

resource "aws\_subnet" "my\_subnet1" {

cidr\_block = "10.0.0.0/25"

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

availability\_zone = "ap-south-1a"

tags = {

Name = "mysubnet1"

}

}

resource "aws\_internet\_gateway" "my\_gateway" {

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

tags = {

Name = "mygateway"

}

}

resource "aws\_route\_table" "my\_route\_table" {

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

route {

cidr\_block = "0.0.0.0/0"

gateway\_id = aws\_internet\_gateway.my\_gateway.id

}

tags = {

Name= "myroutetable"

}

}

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

name = "my\_security"

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

ingress {

from\_port = 0

protocol = "-1"

to\_port = 0

cidr\_blocks = ["0.0.0.0/0"]

}

egress {

from\_port = 0

protocol = "-1"

to\_port = 0

cidr\_blocks = ["0.0.0.0/0"]

}

}

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

route\_table\_id = aws\_route\_table.my\_route\_table.id

subnet\_id = aws\_subnet.my\_subnet1.id

}

resource "aws\_instance" "intelliqit" {

ami = "ami-0c1a7f89451184c8b"

instance\_type = "t2.micro"

availability\_zone = "ap-south-1a"

subnet\_id = aws\_subnet.my\_subnet1.id

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

associate\_public\_ip\_address = true

key\_name = "mumbai\_key"

user\_data = <<EOF

#!/bin/bash

sudo apt-get update

curl -fsSL https://get.docker.com -o get-docker.sh

sh get-docker.sh

sudo docker run nginx --name webserver -d -p 8888:80 nginx

EOF

tags = {

Name = "intelliqit"

}

}

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Above project using variables to make it more reusable

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provider "aws" {

region = "ap-south-1"

access\_key = "AKIAS43BASASCOFOPNNZ"

secret\_key = "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"

}

variable "myvpc\_cidr" {}

variable "mysubnet\_cidr" {}

variable "myzone" {}

variable "route\_cidr" {}

variable "from\_port" {}

variable "to\_port" {}

variable "protocol" {}

variable "cidr\_for\_security" {}

variable "ami" {}

variable "type" {}

variable "security\_key" {}

variable "public\_ip" {}

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

cidr\_block = var.myvpc\_cidr

tags = {

Name = "myvpc"

}

}

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

cidr\_block = var.mysubnet\_cidr

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

availability\_zone = var.myzone

tags = {

Name = "mysubnet"

}

}

resource "aws\_internet\_gateway" "my\_gateway" {

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

tags = {

Name = "mygateway"

}

}

resource "aws\_route\_table" "my\_route\_table" {

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

route {

cidr\_block = var.route\_cidr

gateway\_id = aws\_internet\_gateway.my\_gateway.id

}

tags = {

Name = "myroute table"

}

}

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

route\_table\_id = aws\_route\_table.my\_route\_table.id

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

}

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

name = "my\_security"

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

ingress {

from\_port = var.from\_port

protocol = var.protocol

to\_port = var.to\_port

cidr\_blocks = [var.cidr\_for\_security]

}

egress {

from\_port = var.from\_port

protocol = var.protocol

to\_port = var.to\_port

cidr\_blocks = [var.cidr\_for\_security]

}

tags = {

Name = "mysecurity"

}

}

resource "aws\_instance" "intelliqt\_server" {

ami = var.ami

instance\_type = var.type

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

availability\_zone = var.myzone

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

key\_name = var.security\_key

associate\_public\_ip\_address = var.public\_ip

tags = {

Name = "intelliqit"

}

}

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Variables files

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myvpc\_cidr="10.0.0.0/24"

mysubnet\_cidr="10.0.0.0/25"

myzone = "ap-south-1a"

route\_cidr = "0.0.0.0/0"

from\_port = "0"

to\_port = "0"

protocol = "-1"

cidr\_for\_security = "0.0.0.0/0"

ami = "ami-0c1a7f89451184c8b"

type = "t2.micro"

security\_key = "mumbai\_key"

public\_ip = true

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