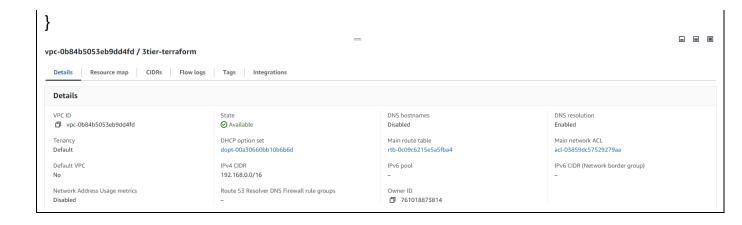
DEVOPS

No:-	Content
1.	Terraform VPC Subnet IGW Route Table Subnet Association Create Security Group Launch instance

Create VPC

```
resource "aws_vpc" "tier-3-project" {
    cidr_block = "192.168.0.0/16"
    tags = {
        Name = "3tier-terraform"
    }
```



Create Subnet

```
resource "aws_subnet" "sub1" {
vpc_id = aws_vpc.tier-3-project.id
cidr_block = "192.168.1.0/24"
availability_zone = "us-east-1a"
map_public_ip_on_launch = "true"
}
                                    subnet-06//f4/d445554541
                                                             (y) Available
                                                                            vpc-06289054d2486799c | Defualt VPC
                                                                                                                   172.51.48.0/20
                                    subnet-09f91c771ec8bb5a2
                                                             vpc-06289054d2486799c | Defualt VPC
                                                                                                                   172.31.0.0/20
                                                             ⊘ Available
                                                                            vpc-0b84b5053eb9dd4fd | 3tier-terraform
                                                                                                                   192.168.1.0/24
                                    subnet-0d4ebd9b6c6c14bf1
                                                             172.31.64.0/20
                                    subnet-00a1b06b1c5e81b43
                                                                            vpc-06289054d2486799c | Defualt VPC
```

Create IGW

```
resource "aws_internet_gateway" "int" {

vpc_id=aws_vpc.tier-3-project.id

tags = {

Name="igw-40-40"
```

Create Route Table

```
# route = [{
# gateway_id=aws_internet_gateway.int.id
# cidr_block="0.0.0.0/0"
```

```
# }]
}
```

Routing

```
resource "aws_route" "route_to_internet" {

route_table_id = aws_route_table.Public-RT.id

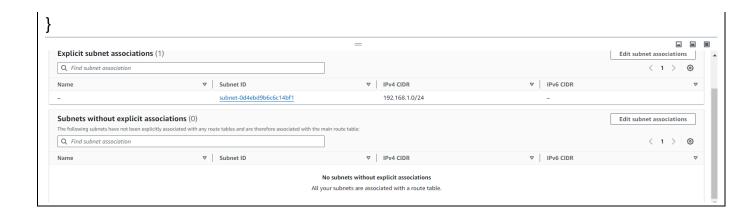
destination_cidr_block = "0.0.0.0/0"

gateway_id = aws_internet_gateway.int.id

}
```

Subnet association

```
resource "aws_route_table_association" "demo" {
    subnet_id = aws_subnet.sub1.id
    route_table_id = aws_route_table.Public-RT.id
```



Create Security Group

```
resource "aws_security_group" "sg" {
vpc_id = aws_vpc.tier-3-project.id
tags = {
Name="sg_3tier"
}
ingress = [{
from_port = 22
         = 22
to_port
protocol = "tcp"
cidr_blocks = ["0.0.0.0/0"]
description = "Allow SSH access from anywhere"
ipv6_cidr_blocks = []
prefix_list_ids = []
```

```
security_groups = []
self
            = false
}]
egress = [{
from_port
              = 0
to_port = 0
protocol = "-1"
cidr_blocks = ["0.0.0.0/0"]
description = "Allow all outbound traffic"
ipv6_cidr_blocks = []
prefix_list_ids = []
security_groups = []
            = false
self
}]
  g_3tier
                 sq-0ade683a7e565ba8c
                                    terraform-202410071307494307000... <u>vpc-0b84b5053eb9dd4fd</u> [2]
                                                                           Managed by Terraform
                                                                                              761018873814
```

```
resource "aws instance" "inst" {
ami = "ami-0866a3c8686eaeeba"
instance_type = "t2.micro"
key_name="new_key"
subnet_id = aws_subnet.sub1.id
vpc_security_group_ids = [aws_security_group.sg.id]
tags = {
Name="public_instance"
}
                                                                                                                                                                                                                                                                                                        Last updated C Connect Instance state ▼ Actions ▼ Launch instances ▼
                                                                       Instances (1) Info
                                                                      Q Find Instance by attribute or tag (case-sensitive)
        EC2 Global View
                                                                                                                                                                                                                                             All states ▼
                                                                     Instance state = running X Clear filters
                                                                                                                                                                  Instance ID Instance state v Instance type v Status check Alarm status Availability Zone v Public IPv4 DNS v Public IPv4 ... v Public IPv4 ... v Public IPv4 III v Public IPv4
         Instance Types
        Launch Templates
        Spot Requests
        Dedicated Hosts
        Capacity Reservations
   ▼ Images
        AMI Catalog
       Lifecycle Manager
    ▼ Network & Security
        Security Groups
       Elastic IPs
                                                              Select an instance
```