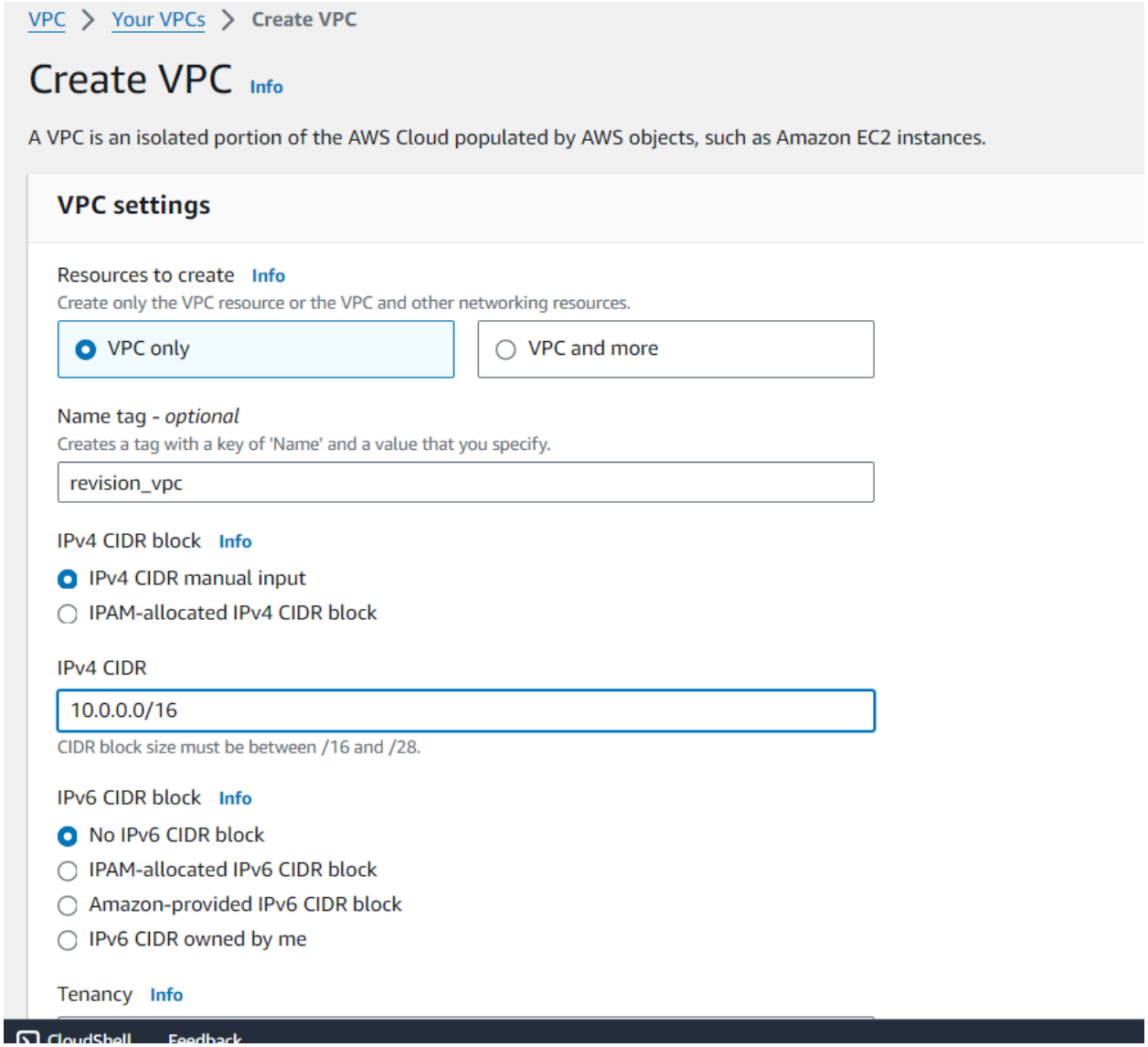
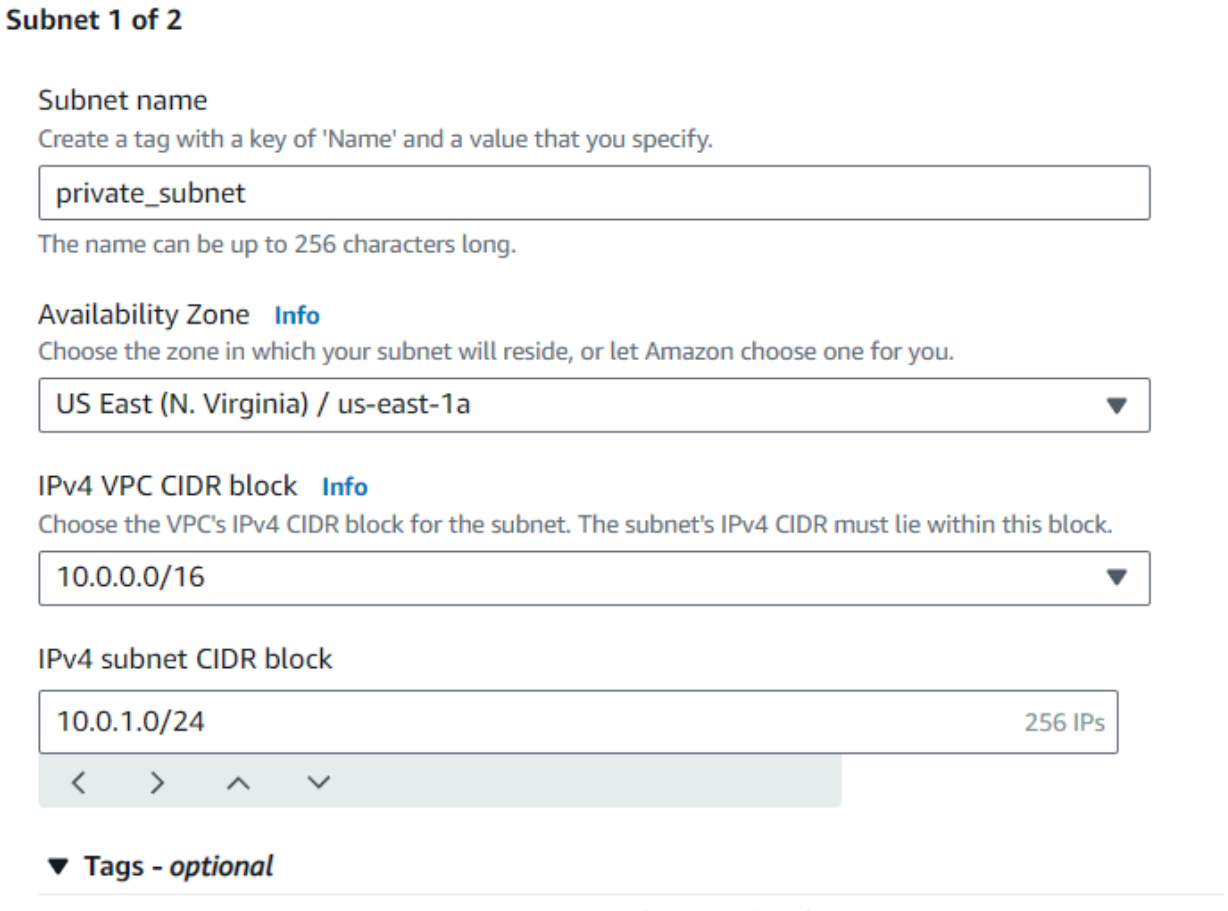
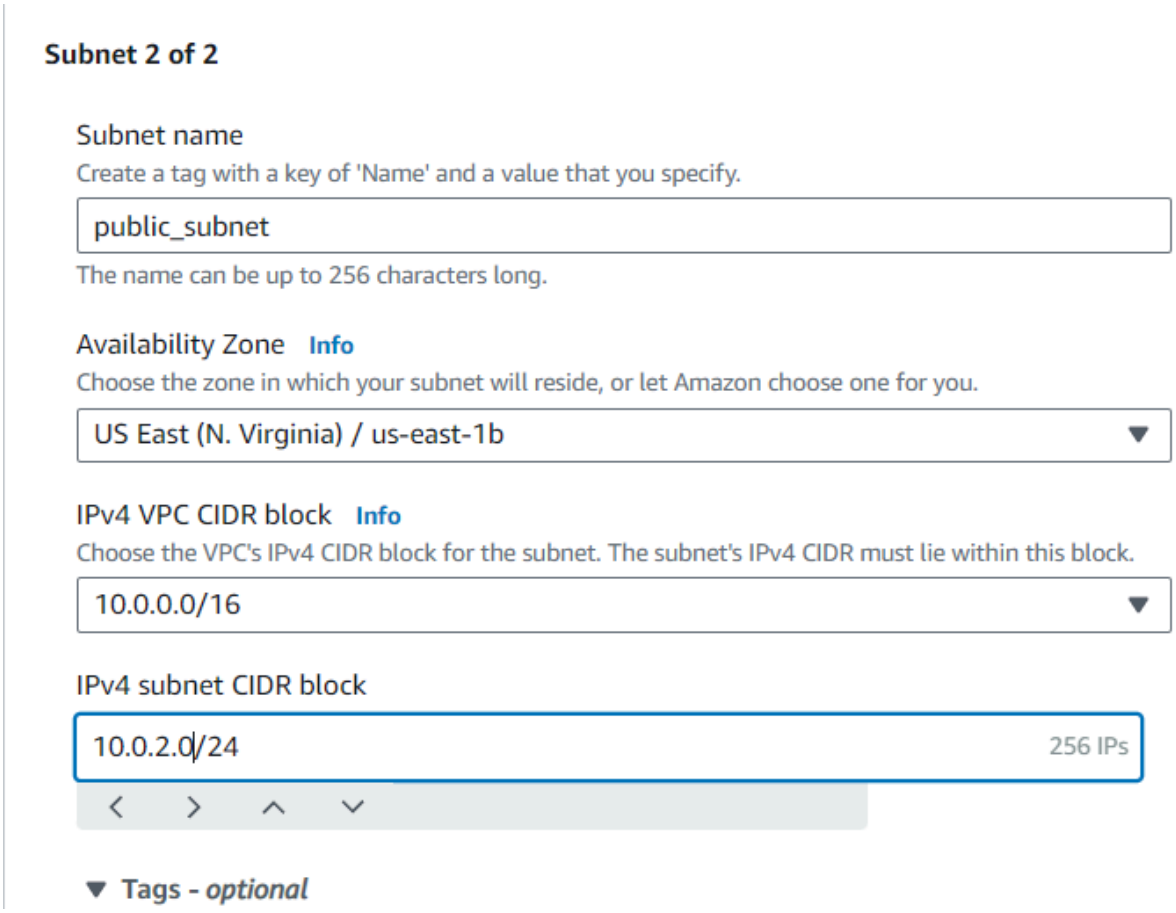
Create Vpc:


VPC > Your VPCs > Create VPC
Create VPC Info
A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.
VPC settings
Resources to create Info
Create only the VPC resource or the VPC and other networking resources.
VPC only
VPC and more
Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.
revision_vpc
IPv4 CIDR block Info
IPv4 CIDR manual input
IPAM-allocated IPv4 CIDR block
IPv4 CIDR
10.0.0.0/16
CIDR block size must be between /16 and /28.
IPv6 CIDR block Info
No IPv6 CIDR block
IPAM-allocated IPv6 CIDR block
Amazon-provided IPv6 CIDR block
IPv6 CIDR owned by me
Tenancy Info
CloudShell
Feedback

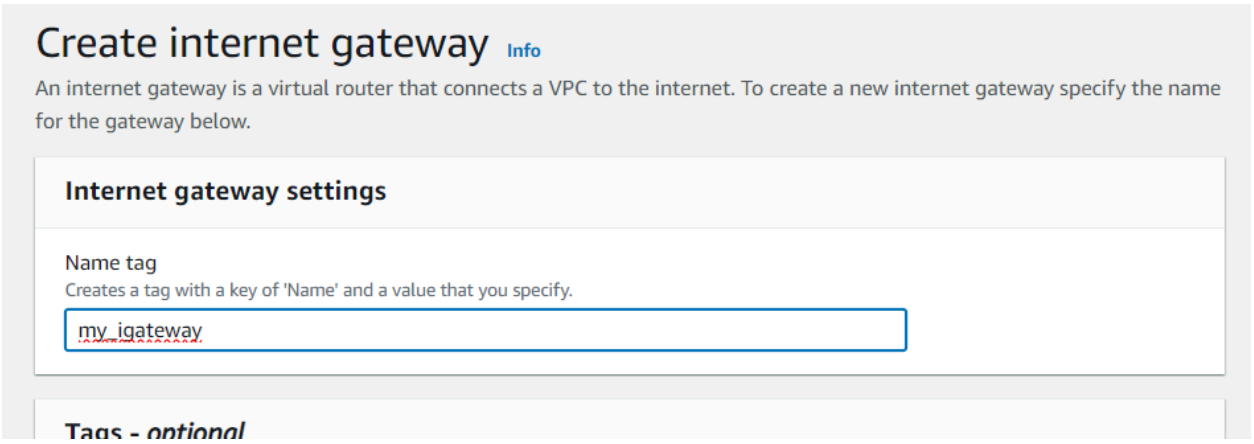
Create private subnet:



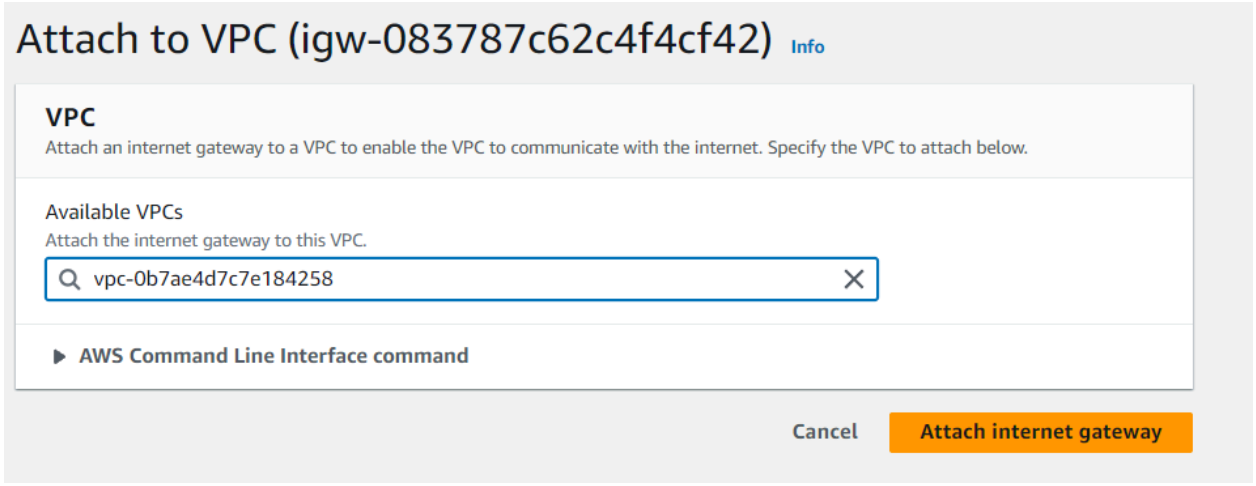
Create public subnet:



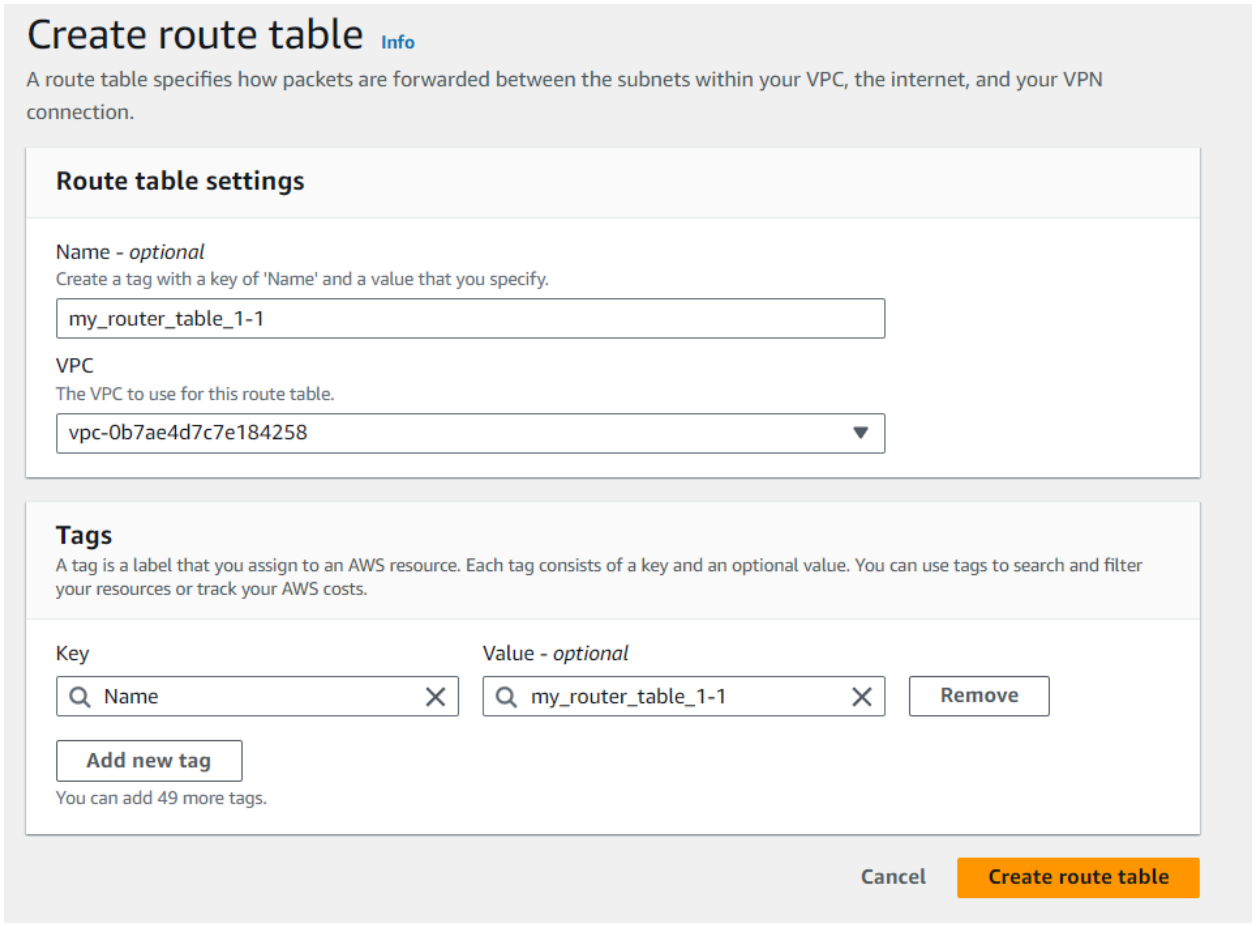
Create internet gateway



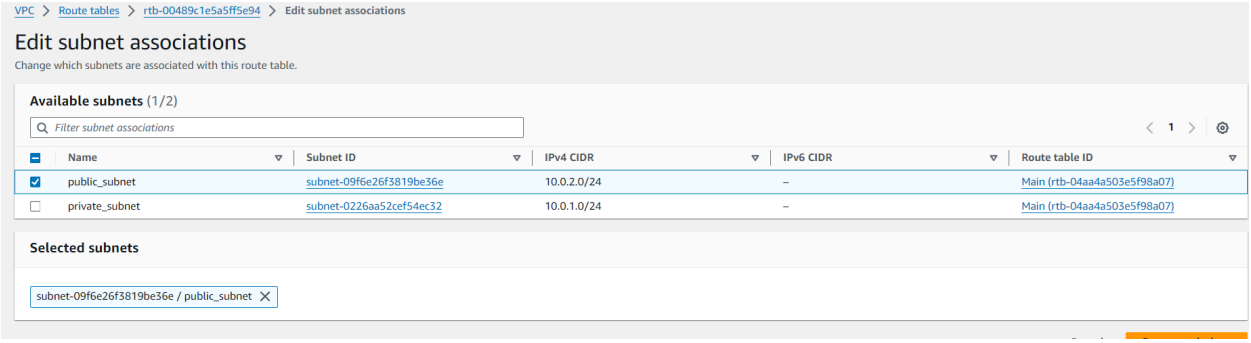
Attach vpc to internet gateway:



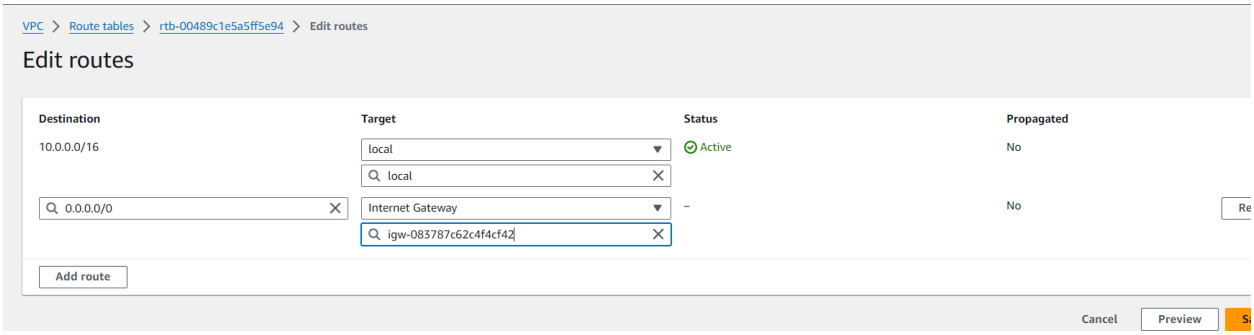
Create router table



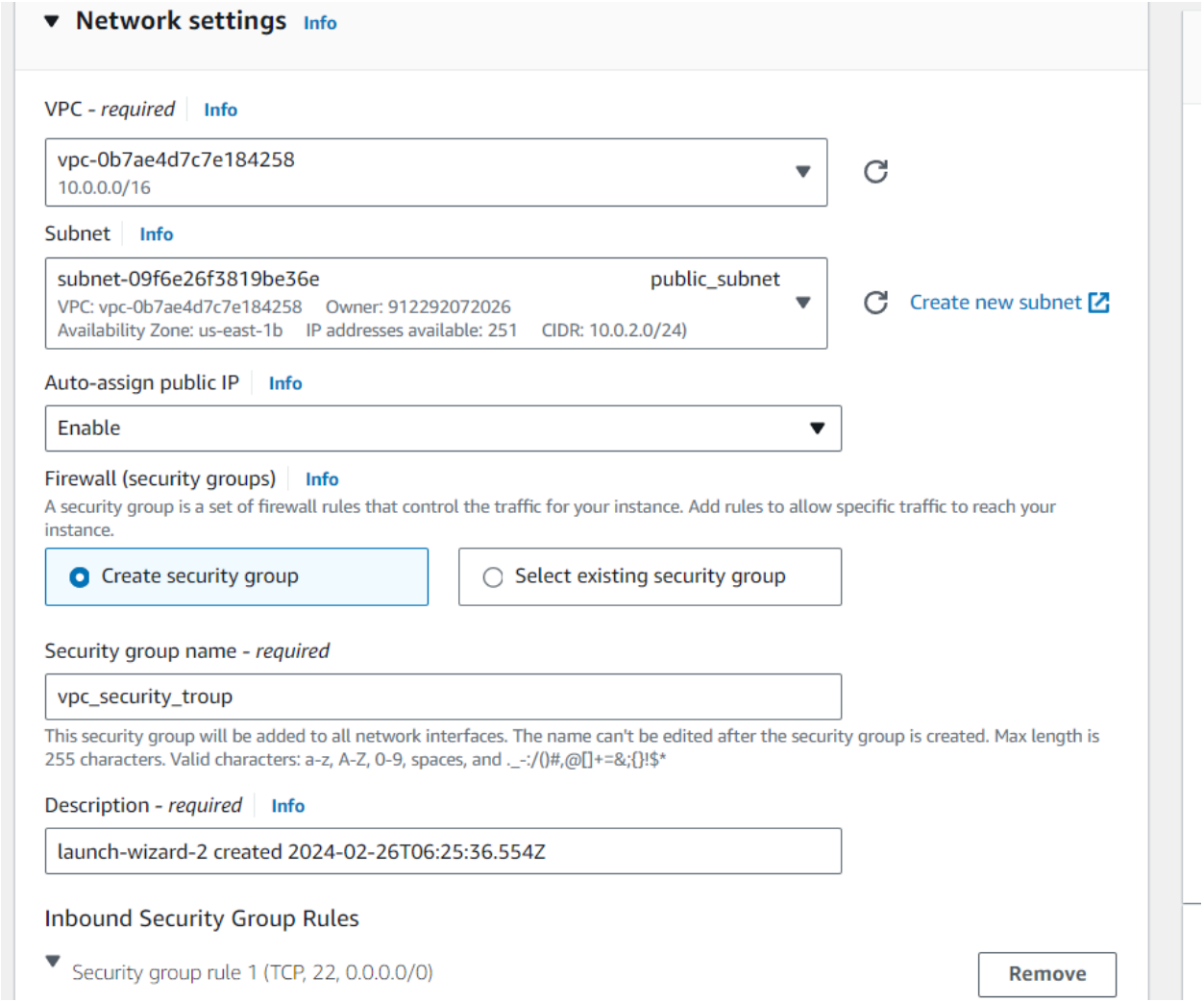
Edit subnet allocation:



Edit route table:



Create ec2 instance with following network configuration:



Install webserver:

```
Complete!
[ec2-user@ip-10-0-2-174 ~]$ sudo yum install httpd
Last metadata expiration check: 0:03:49 ago on Mon Feb 26 06:35:41 2024.
Dependencies resolved.
```

Start webserver:

```
[ec2-user@ip-10-0-2-174 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-2-174 ~]$
```

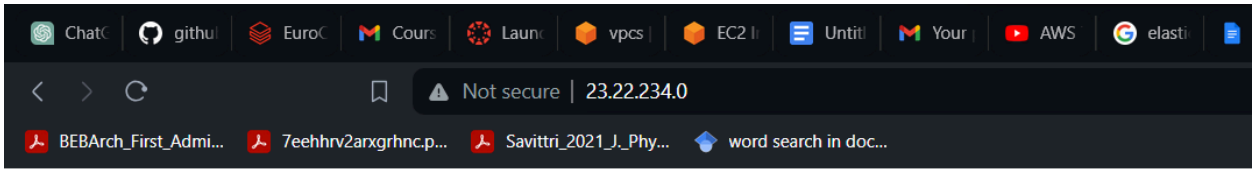
Access the webserver public ip:

```
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-2-174 ~]$
```

i-0be0ac0fc46851dae (vpc_webserver_instance)

PublicIPs: 23.22.234.0 PrivateIPs: 10.0.2.174

WErver server running:



It works!

Now we need to upload our static portfolio website files.
For my case i upload a index.html and a image file

To upload the website file we first need to create a temp folder inside the EC2:

```
[ec2-user@ip-10-0-2-30 ~]$ mkdir temp
[ec2-user@ip-10-0-2-30 ~]$ ls
temp
```

Now upload the website files to this temp folder from local machine as:

```
C:\Users\hp\Downloads>scp -i "keys2.pem" C:\Users\hp\Desktop\static_web/* ec2-user@3.85.81.49:temp/
The authenticity of host '3.85.81.49 (3.85.81.49)' can't be established.
ED25519 key fingerprint is SHA256:9aPSGZI9YglKS0xNsgHouRQ02kqxJ4tcBPdIfaicDJ4.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])?
Warning: Permanently added '3.85.81.49' (ED25519) to the list of known hosts.
index1.html                                   100%  818     2.7KB/s   00:00
ppss.jpg                                      100%  231KB 157.2KB/s   00:01

C:\Users\hp\Downloads>
```

Now with sudo permission we can move file from temp folder to /var/www/html/ folder inside ec2 machine:

```
[ec2-user@ip-10-0-2-30 ~]$ cd temp
[ec2-user@ip-10-0-2-30 temp]$ ls
index1.html  ppss.jpg
[ec2-user@ip-10-0-2-30 temp]$ sudo mv * /var/www/html/
[ec2-user@ip-10-0-2-30 temp]$ cd /var/www/html/
[ec2-user@ip-10-0-2-30 html]$ ls
index1.html  ppss.jpg
```

Now start the httpd servers:

```
[ec2-user@ip-10-0-2-30 /]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
```

Now access the side with the public ip of vpc:

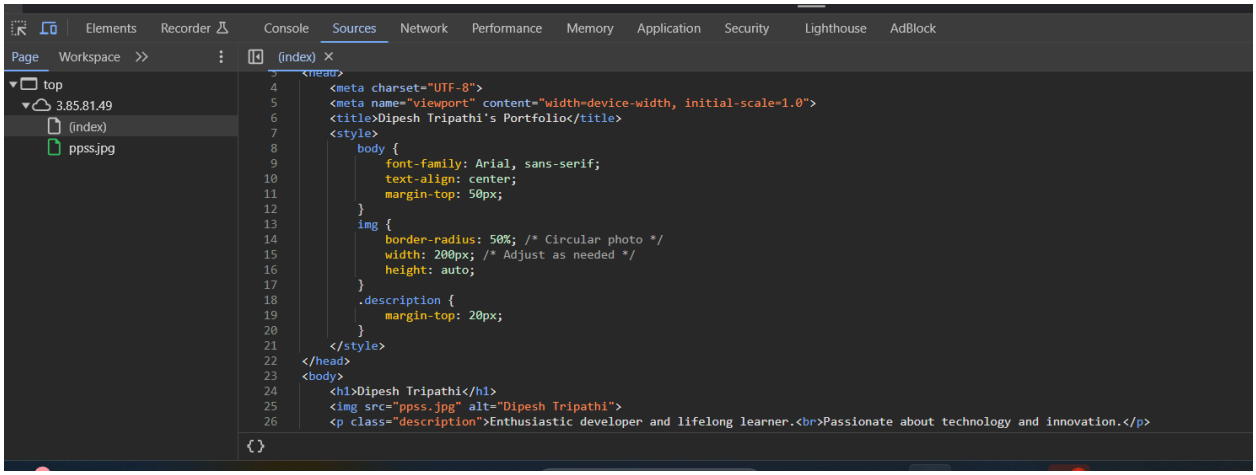
PublicIPs: 3.85.81.49 PrivateIPs: 10.0.2

Finally here we go!! The simple static portfolio is hosted:

Dipesh Tripathi

Enthusiastic developer and lifelong learner.
Passionate about technology and innovation.

Hosted file:



In this lab we learn to configure VPC and assign vpc to ec2 and finally host a static website through EC2.