PROJECT-1:- DEPLOYING A WEBSITE ON AWS EC2 INSTANCE

1.creating vpc

Steps :

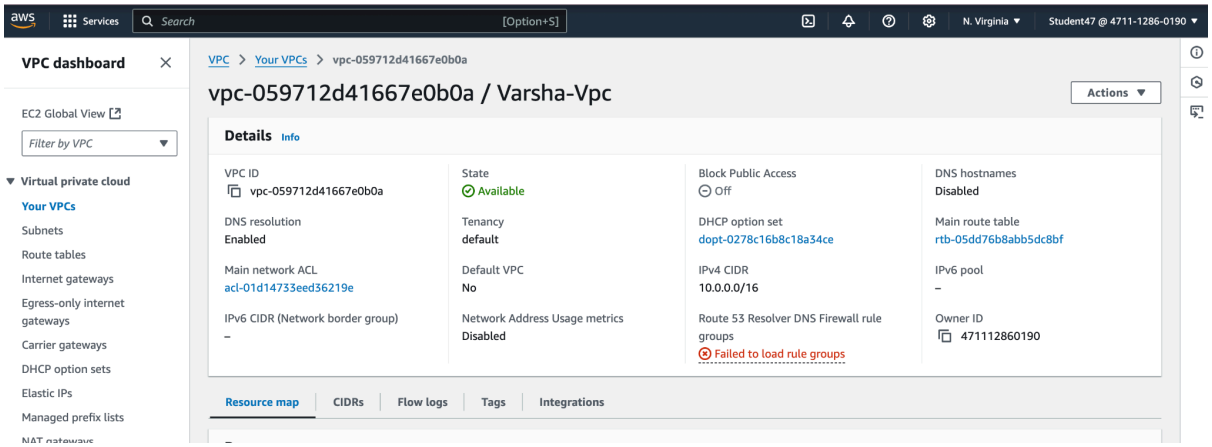
1. In AWS console, search VPC.

2. In VPC dashboard , you will get my VPC's and click on myvpc's.

3. Click on create VPC. Select resource to create as vpc only.

4. Give name as Varsha-vpc and IPv4 CIDR as 10.0.0.0/16.

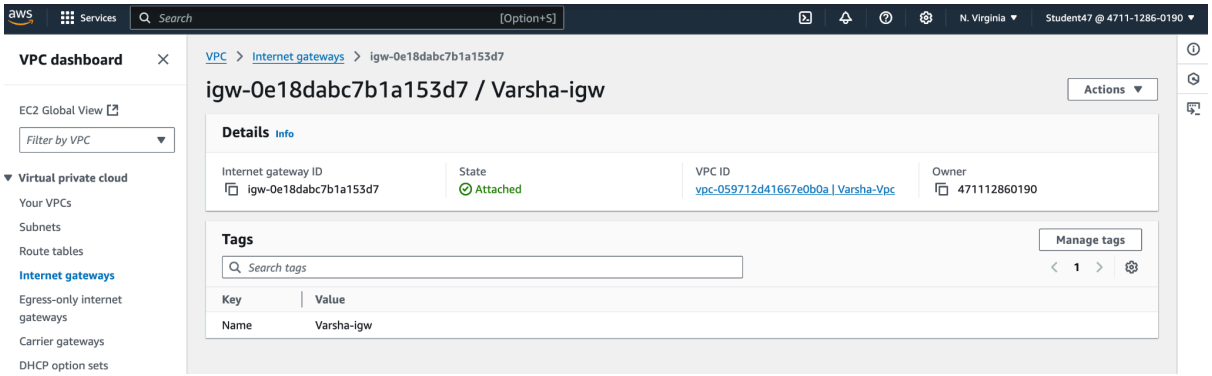
5. Then click on create VPC.



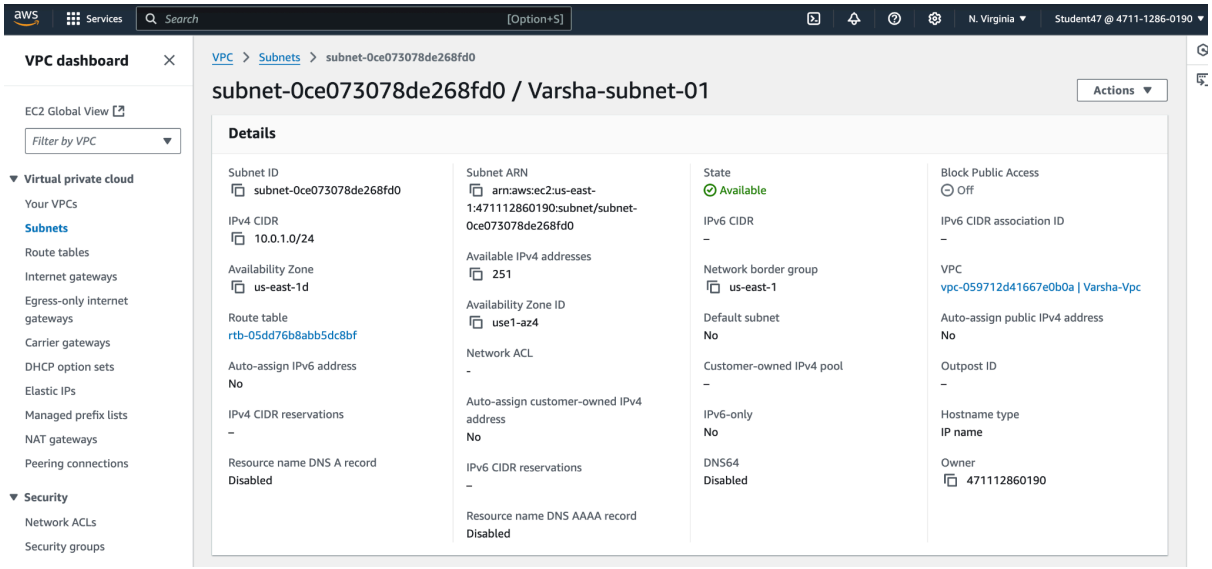
Internet Gateway:

Steps :

1. In VPC dashboard, click on Internet Gateway.
2. To create Internet gateway, click on create Internet Gateway.
3. Then give name as Varsha-igw and click on create Internet Gateway.
4. Your internet Gateway is created , right click on the gateway and click on attach to vpc .


aws
Services
Search
[Option+S]
N. Virginia
Student47 @ 4711-1286-0190
VPC dashboard
EC2 Global View
Filter by VPC
Virtual private cloud
Your VPCs
Subnets
Route tables
Internet gateways
Egress-only internet gateways
Carrier gateways
DHCP option sets
VPC > Internet gateways > igw-0e18dabc7b1a153d7
igw-0e18dabc7b1a153d7 / Varsha-igw
Actions
Details Info
Internet gateway ID
igw-0e18dabc7b1a153d7
State
Attached
VPC ID
vpc-059712d41667e0b0a | Varsha-Vpc
Owner
471112860190
Tags
Manage tags
Search tags
1
Key
Value
Name
Varsha-igw

Subnet1: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Services
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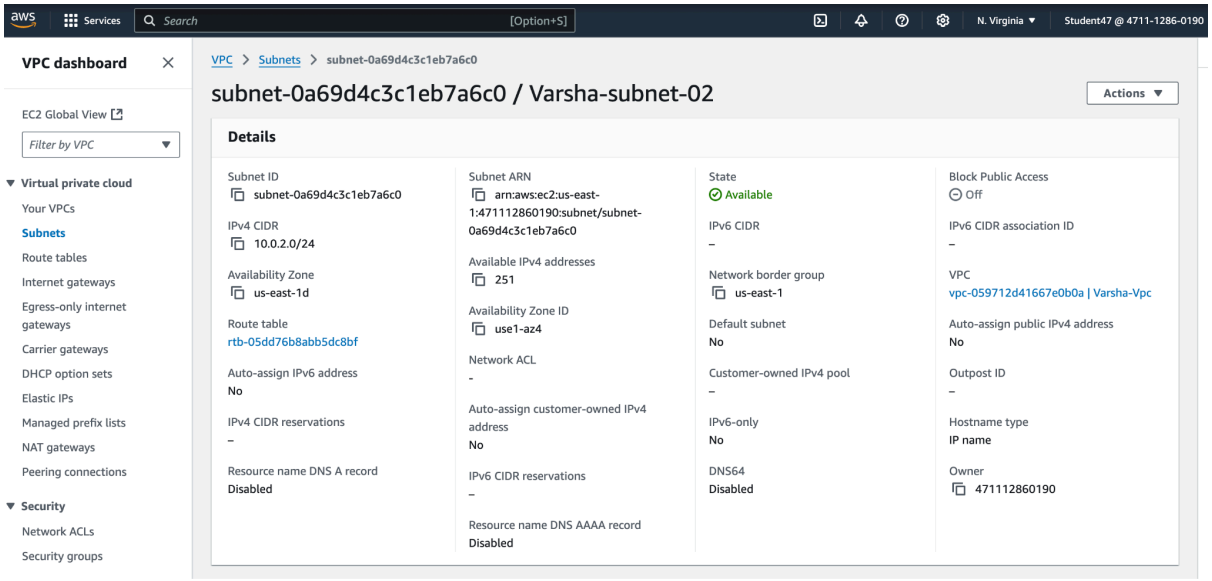
Carrier gateways
DHCP option sets
Elastic IPs
Managed prefix lists
NAT gateways
Peering connections
Security
Network ACLs
Security groups
VPC > Subnets > subnet-0ce073078de268fd0
subnet-0ce073078de268fd0 / Varsha-subnet-01
Actions
Details
Subnet ID
subnet-0ce073078de268fd0
Subnet ARN
arn:aws:ec2:us-east-1:471112860190:subnet/subnet-0ce073078de268fd0
State
Available
Block Public Access
Off
IPv4 CIDR
10.0.1.0/24
IPv6 CIDR
–
IPv6 CIDR association ID
–
Availability Zone
us-east-1d
Available IPv4 addresses
251
Network border group
us-east-1
VPC
vpc-059712d41667e0b0a | Varsha-Vpc
Route table
rtb-05dd76b8abb5dc8bf
Availability Zone ID
use1-az4
Default subnet
No
Auto-assign public IPv4 address
No
Auto-assign IPv6 address
No
Network ACL
-
Customer-owned IPv4 pool
–
Outpost ID
–
IPv4 CIDR reservations
–
Auto-assign customer-owned IPv4 address
No
IPv6-only
No
Hostname type
IP name
Resource name DNS A record
Disabled
IPv6 CIDR reservations
–
DNS64
Disabled
Owner
471112860190
Resource name DNS AAAA record
Disabled

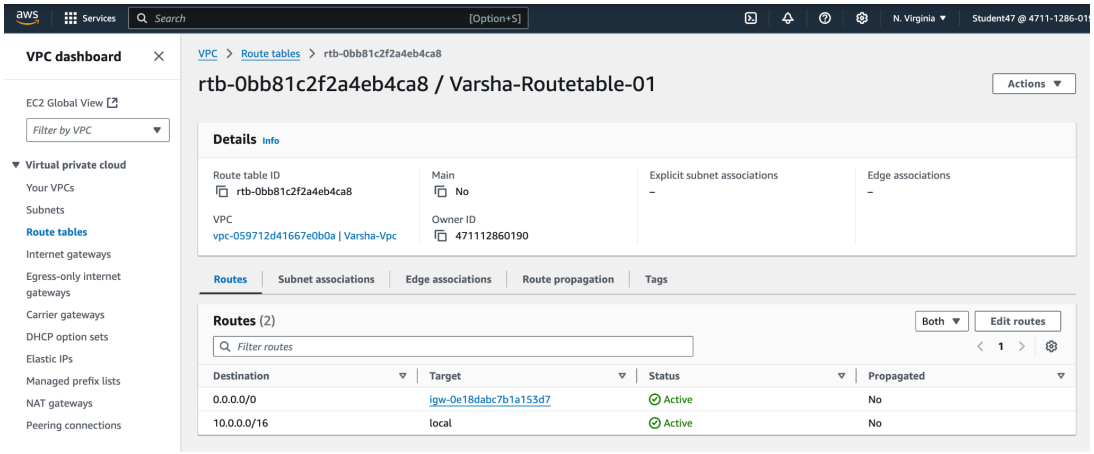
Subnet2:



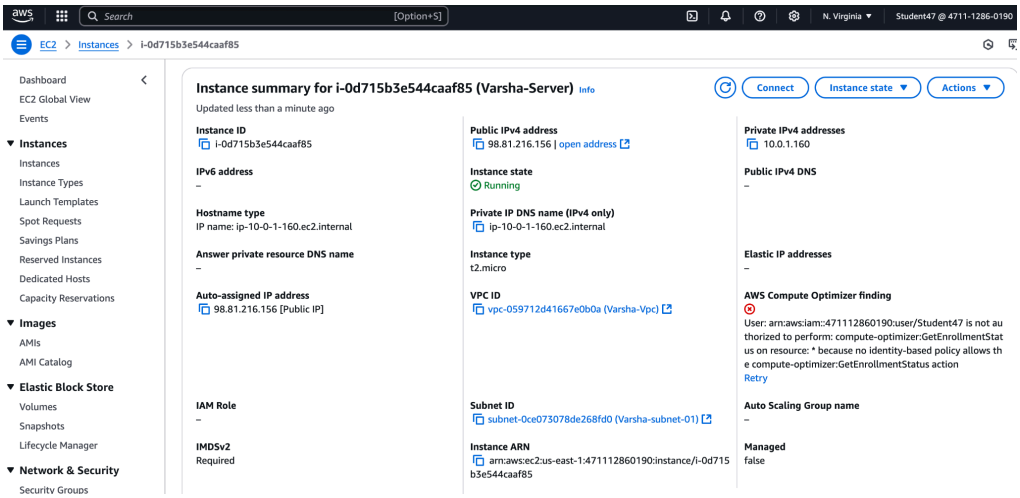
Router Table:

Steps

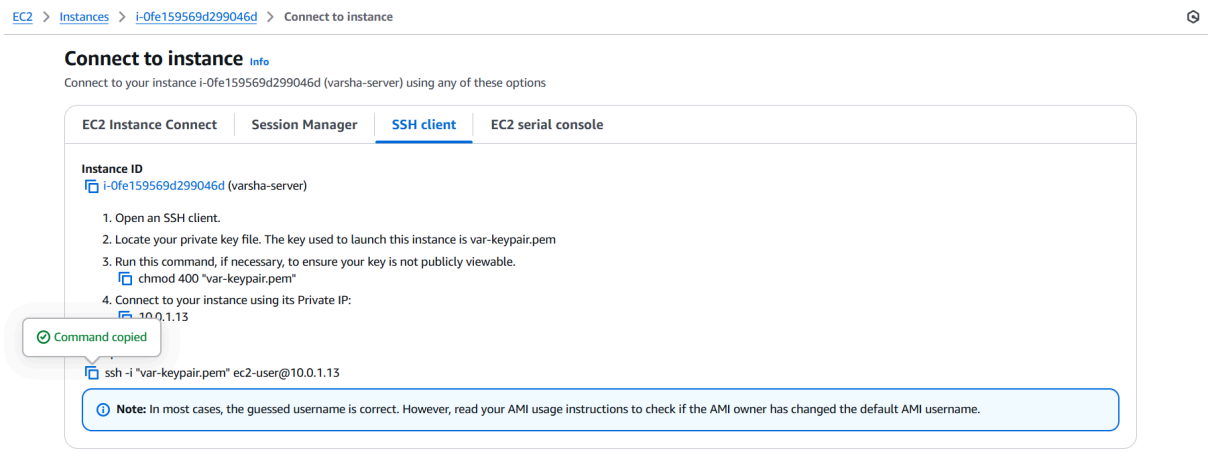
1. To create Route table, click on create route table.
2. In route table setting, give route table name as Varsha-route-table-01 and select vpc that is created.
3. Then click on create route table.
4. After route table is created, go to routes and click on edit route and then click on add route.
5. Then in destination, select 0.0.0.0/0 as destination and target as Internet Gateways .
6. After selecting internet gateway, it allows to select the igw- and select the internet gateway that is created by you.
7. At last click on save changes.
8. Then go to subnet association and click on edit subnet association.
9. Select the subnet you have created and click on save changes.



5.Create EC2 Instance



Connection:



Command prompt:

```
➜  Downloads ssh -i "Varsha-Keypair-New.pem" ec2-user@98.81.216.156
       #_
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~~     \###|
  ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
Last login: Fri Dec 13 00:23:11 2024 from 116.75.104.29
[ec2-user@ip-10-0-1-160 ~]$ sudo yum install httpd -y
Amazon Linux 2023 repository                                                                        32 MB/s |  29 MB     00:00
Amazon Linux 2023 Kernel Livepatch repository                                                       64 kB/s |  11 kB     00:00
Dependencies resolved.
================================================================================================================================
 Package                                 Architecture                 Version                          Repository                Siz
================================================================================================================================
Installing:
 httpd                                   x86_64                       2.4.62-1.amzn2023                amazonlinux                48
Installing dependencies:
 apr                                     x86_64                       1.7.2-2.amzn2023.0.2             amazonlinux               129
 apr-util                                x86_64                       1.6.3-1.amzn2023.0.1             amazonlinux                98
 generic-logos-httpd                     noarch                       18.0.0-12.amzn2023.0.3           amazonlinux                19
 httpd-core                              x86_64                       2.4.62-1.amzn2023                amazonlinux               1.4
 httpd-filesystem                        noarch                       2.4.62-1.amzn2023                amazonlinux                14
 httpd-tools                             x86_64                       2.4.62-1.amzn2023                amazonlinux                81
 libbrotli                               x86_64                       1.0.9-4.amzn2023.0.2             amazonlinux               315
 mailcap                                 noarch                       2.1.49-3.amzn2023.0.3            amazonlinux                33
Installing weak dependencies:
 apr-util-openssl                        x86_64                       1.6.3-1.amzn2023.0.1             amazonlinux                17
 mod_http2                               x86_64                       2.0.27-1.amzn2023.0.3            amazonlinux               166
 mod_lua                                 x86_64                       2.4.62-1.amzn2023                amazonlinux                61

Transaction Summary
================================================================================================================================
```

```
[ec2-user@ip-10-0-1-160 ~]$ sudo systemctl start httpd
[ec2-user@ip-10-0-1-160 ~]$ systemctl status httpd
● httpd.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
     Active: active (running) since Fri 2024-12-13 00:27:04 UTC; 8s ago
       Docs: man:httpd.service(8)
   Main PID: 26655 (httpd)
     Status: "Started, listening on: port 80"
      Tasks: 177 (limit: 1111)
     Memory: 13.0M
        CPU: 57ms
     CGroup: /system.slice/httpd.service
             ├─26655 /usr/sbin/httpd -DFOREGROUND
             ├─26656 /usr/sbin/httpd -DFOREGROUND
             ├─26657 /usr/sbin/httpd -DFOREGROUND
             ├─26658 /usr/sbin/httpd -DFOREGROUND
             └─26659 /usr/sbin/httpd -DFOREGROUND

Dec 13 00:27:04 ip-10-0-1-160.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 13 00:27:04 ip-10-0-1-160.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 13 00:27:04 ip-10-0-1-160.ec2.internal httpd[26655]: Server configured, listening on: port 80
[ec2-user@ip-10-0-1-160 ~]$
```

result :