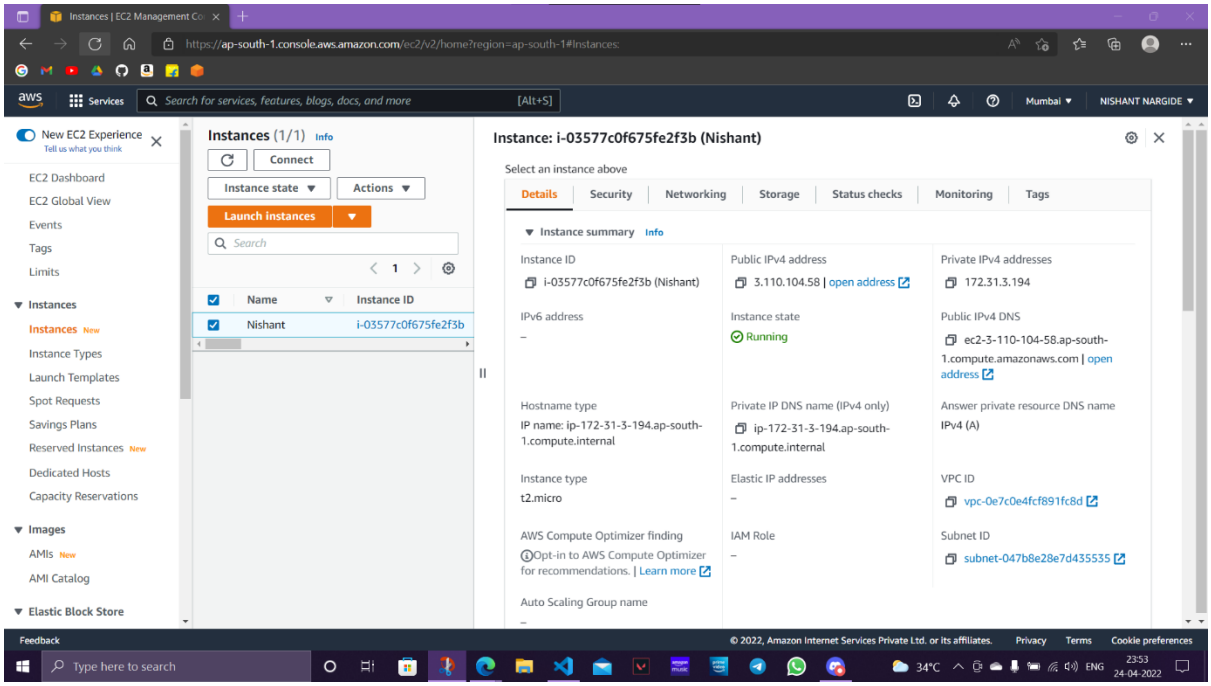
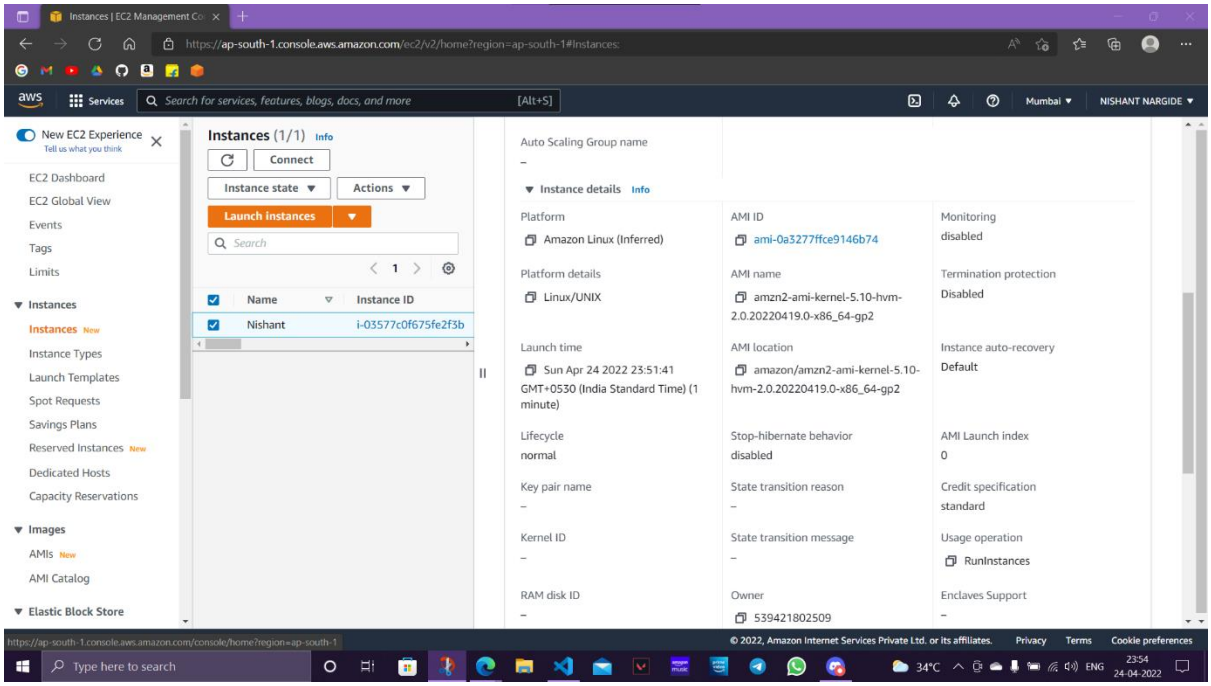
Assignment 2B **32 Nishant N**

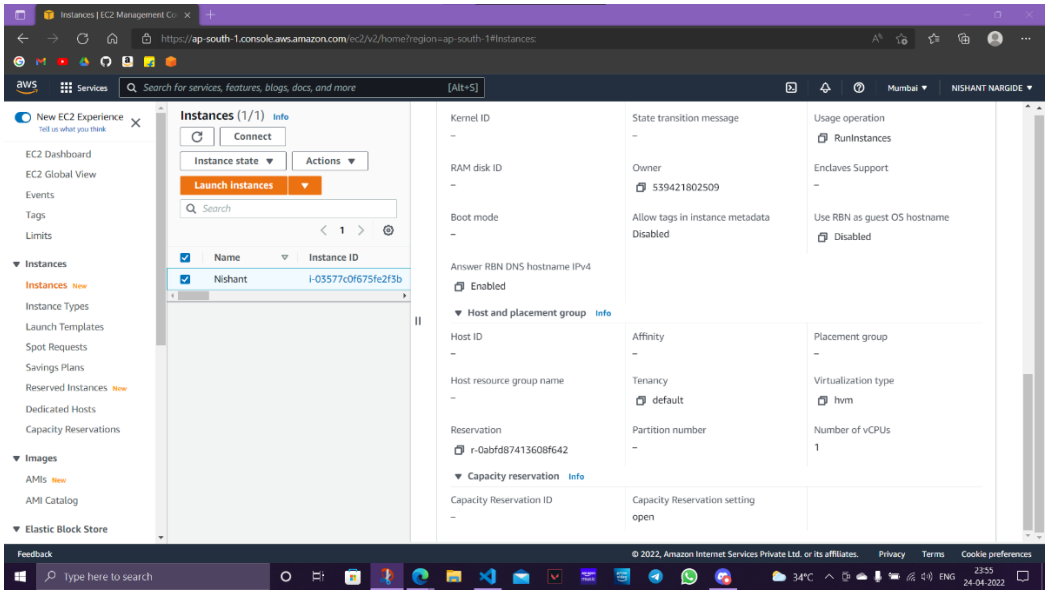
1. Creating Instance on AWS.

Created a Instance of AWS and all Information about AWS

Example: ip address, port, private and public address, instance id etc.







2. Opening the Amazon Linux Console and updating the all package.

Command: sudo yum update –

```
Total download size: 681 k
Is this ok [y/d/N]: y
Downloading packages:
Delta RPMs disabled because /usr/bin/applydeltarpm not installed.
(1/2): libcurl-7.79.1-2.amzn2.0.1.x86_64.rpm                               | 321 kB  00:00:00
(2/2): curl-7.79.1-2.amzn2.0.1.x86_64.rpm                                  | 359 kB  00:00:00
--------------------------------------------------------------------------------------------------
Total                                                       4.9 MB/s | 681 kB  00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Updating   : libcurl-7.79.1-2.amzn2.0.1.x86_64                                          1/4
  Updating   : curl-7.79.1-2.amzn2.0.1.x86_64                                             2/4
  Cleanup    : curl-7.79.1-1.amzn2.0.1.x86_64                                             3/4
  Cleanup    : libcurl-7.79.1-1.amzn2.0.1.x86_64                                          4/4
  Verifying  : libcurl-7.79.1-2.amzn2.0.1.x86_64                                          1/4
  Verifying  : curl-7.79.1-2.amzn2.0.1.x86_64                                             2/4
  Verifying  : libcurl-7.79.1-1.amzn2.0.1.x86_64                                          3/4
  Verifying  : curl-7.79.1-1.amzn2.0.1.x86_64                                             4/4

Updated:
  curl.x86_64 0:7.79.1-2.amzn2.0.1                    libcurl.x86_64 0:7.79.1-2.amzn2.0.1

Complete!
[ec2-user@ip-172-31-11-31 ~]$
```

3. Installing the docker.

Command: sudo yum install –y docker

```
Updated:
  curl.x86_64 0:7.79.1-2.amzn2.0.1                    libcurl.x86_64 0:7.79.1-2.amzn2.0.1

Complete!
[ec2-user@ip-172-31-11-31 ~]$ sudo yum install -y docker
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
---> Package docker.x86_64 0:20.10.13-2.amzn2 will be installed
--> Processing Dependency: runc >= 1.0.0 for package: docker-20.10.13-2.amzn2.x86_64
--> Processing Dependency: libcgroup >= 0.40.rc1-5.15 for package: docker-20.10.13-2.amzn2.x86_64
--> Processing Dependency: containerd >= 1.3.2 for package: docker-20.10.13-2.amzn2.x86_64
--> Processing Dependency: pigz for package: docker-20.10.13-2.amzn2.x86_64
--> Running transaction check
---> Package containerd.x86_64 0:1.4.13-2.amzn2.0.1 will be installed
---> Package libcgroup.x86_64 0:0.41-21.amzn2 will be installed
---> Package pigz.x86_64 0:2.3.4-1.amzn2.0.1 will be installed
---> Package runc.x86_64 0:1.0.3-2.amzn2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

================================================================================
 Package            Arch          Version                 Repository       Size
================================================================================
Installing:
 docker             x86_64        20.10.13-2.amzn2        amzn2extra-docker  40 M
```

```
(4/5): docker-20.10.13-2.amzn2.x86_64.rpm                                                   |  40 MB  00:00:01
(5/5): runc-1.0.3-2.amzn2.x86_64.rpm                                                        | 3.0 MB  00:00:00
--------------------------------------------------------------------------------------------------------------
Total                                                                              64 MB/s |  67 MB  00:00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : runc-1.0.3-2.amzn2.x86_64                                                                  1/5
  Installing : containerd-1.4.13-2.amzn2.0.1.x86_64                                                       2/5
  Installing : libcgroup-0.41-21.amzn2.x86_64                                                             3/5
  Installing : pigz-2.3.4-1.amzn2.0.1.x86_64                                                              4/5
  Installing : docker-20.10.13-2.amzn2.x86_64                                                             5/5
  Verifying  : containerd-1.4.13-2.amzn2.0.1.x86_64                                                       1/5
  Verifying  : pigz-2.3.4-1.amzn2.0.1.x86_64                                                              2/5
  Verifying  : runc-1.0.3-2.amzn2.x86_64                                                                  3/5
  Verifying  : libcgroup-0.41-21.amzn2.x86_64                                                             4/5
  Verifying  : docker-20.10.13-2.amzn2.x86_64                                                             5/5

Installed:
  docker.x86_64 0:20.10.13-2.amzn2

Dependency Installed:
  containerd.x86_64 0:1.4.13-2.amzn2.0.1 libcgroup.x86_64 0:0.41-21.amzn2 pigz.x86_64 0:2.3.4-1.amzn2.0.1 runc.x86_64 0:1.0.3-2.amzn2

Complete!
[ec2-user@ip-172-31-11-31 ~]$
```

4. Starting the Docker

Command: sudo service docker start

```
  Installing : pigz-2.3.4-1.amzn2.0.1.x86_64                                                              4/5
  Installing : docker-20.10.13-2.amzn2.x86_64                                                             5/5
  Verifying  : containerd-1.4.13-2.amzn2.0.1.x86_64                                                       1/5
  Verifying  : pigz-2.3.4-1.amzn2.0.1.x86_64                                                              2/5
  Verifying  : runc-1.0.3-2.amzn2.x86_64                                                                  3/5
  Verifying  : libcgroup-0.41-21.amzn2.x86_64                                                             4/5
  Verifying  : docker-20.10.13-2.amzn2.x86_64                                                             5/5

Installed:
  docker.x86_64 0:20.10.13-2.amzn2

Dependency Installed:
  containerd.x86_64 0:1.4.13-2.amzn2.0.1 libcgroup.x86_64 0:0.41-21.amzn2 pigz.x86_64 0:2.3.4-1.amzn2.0.1 runc.x86_64 0:1.0.3-2.amzn2

Complete!
[ec2-user@ip-172-31-11-31 ~]$ sudo service docker start
Redirecting to /bin/systemctl start docker.service
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
```

5.Command: docker run –help

```
Run a command in a new container
[ec2-user@ip-172-31-11-31 ~]$ docker run --help

Usage:  docker run [OPTIONS] IMAGE [COMMAND] [ARG...]

Run a command in a new container

Options:
      --add-host list                  Add a custom host-to-IP mapping (host:ip)
  -a, --attach list                    Attach to STDIN, STDOUT or STDERR
      --blkio-weight uint16            Block IO (relative weight), between 10 and 1000, or 0 to disable (default 0)
      --blkio-weight-device list       Block IO weight (relative device weight) (default [])
      --cap-add list                   Add Linux capabilities
      --cap-drop list                  Drop Linux capabilities
      --cgroup-parent string           Optional parent cgroup for the container
      --cgroupns string                Cgroup namespace to use (host|private)
                                       'host':    Run the container in the Docker host's cgroup namespace
                                       'private': Run the container in its own private cgroup namespace
                                       '':        Use the cgroup namespace as configured by the
                                                  default-cgroupns-mode option on the daemon (default)
      --cidfile string                 Write the container ID to the file
      --cpu-period int                 Limit CPU CFS (Completely Fair Scheduler) period
      --cpu-quota int                  Limit CPU CFS (Completely Fair Scheduler) quota
      --cpu-rt-period int              Limit CPU real-time period in microseconds
      --cpu-rt-runtime int             Limit CPU real-time runtime in microseconds
  -c, --cpu-shares int                 CPU shares (relative weight)
```