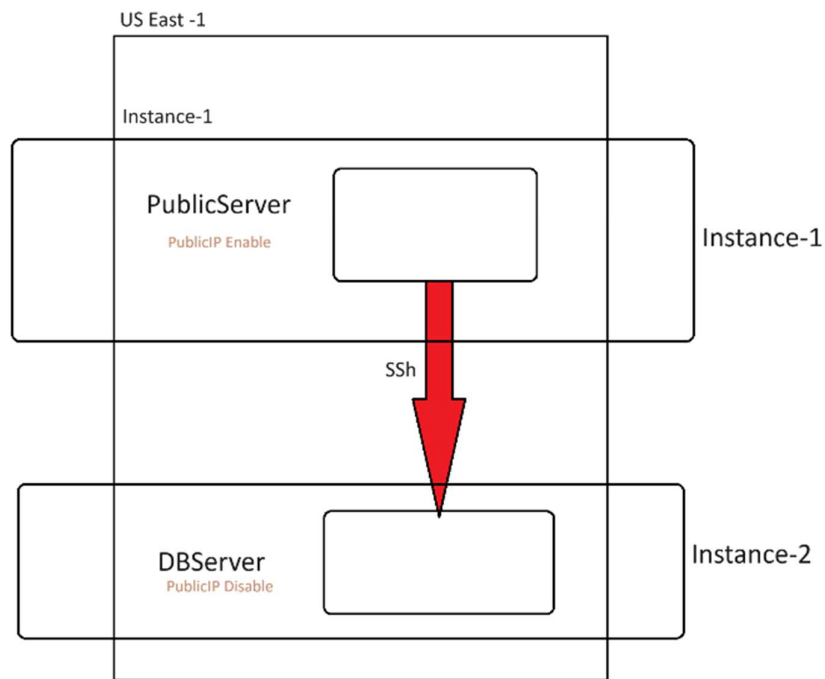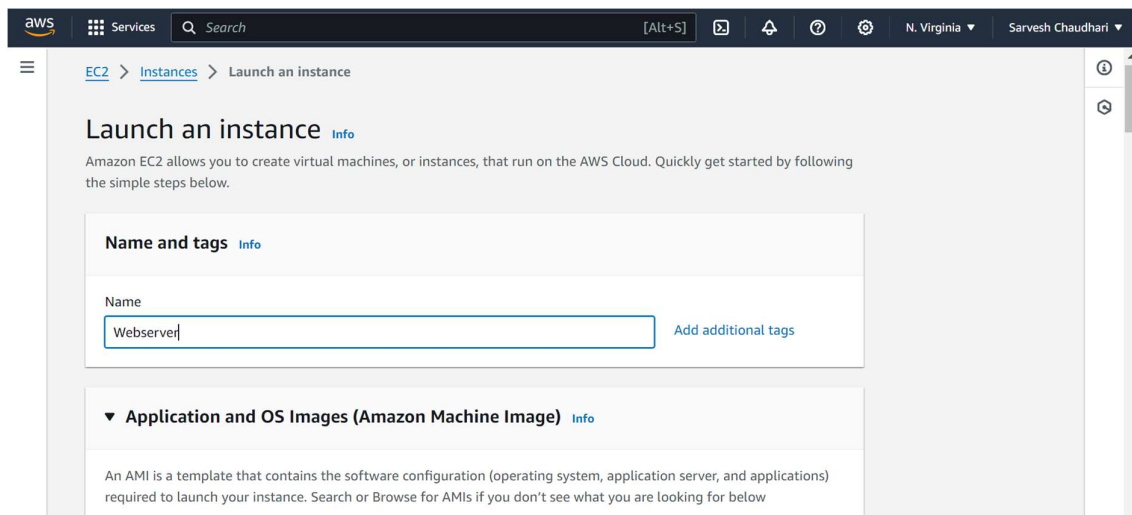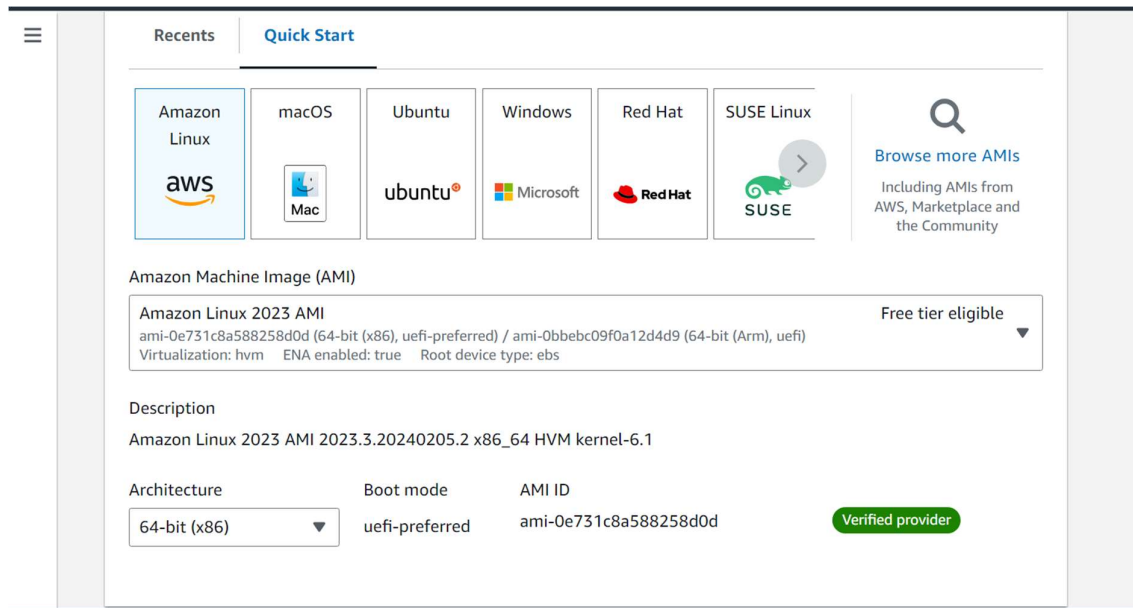Objective:- Using Linux machine to enter another VM Linux machine.

Architecture:-

S1) Creating instance 1 with name 'Webserver' and AMI as Amazon Linux

Creating new key pair linux12.pem
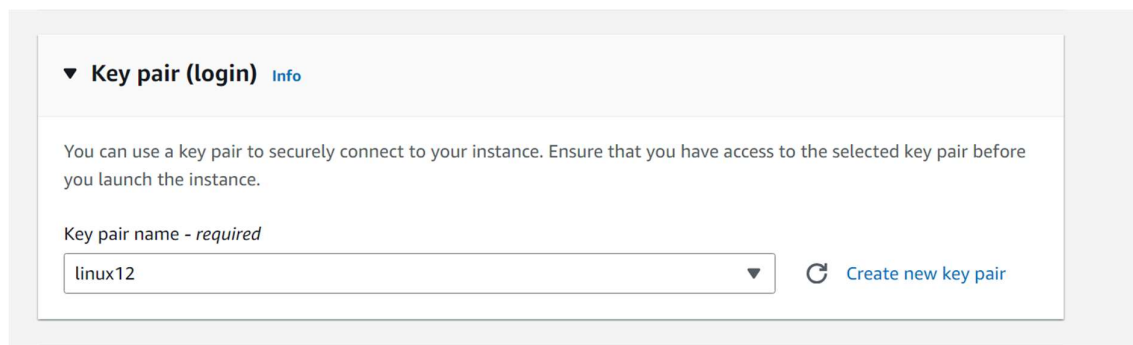
Open Command prompt and type this command in format

Ssh -i key_file_path username@ Public ip address

Type command to open machine in command line

Now next type command as sudo su (which is used to super user do switch user)

Now we will enter in root machine for that first install Hadoop using httdp

Installed successfully

Now start hadoop and enable the service permission

```
Complete!
[root@ip-172-31-22-16 ec2-user]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@ip-172-31-22-16 ec2-user]# service httpd enable
The service command supports only basic LSB actions (start, stop, restart, try-restart, reload, reload-or-restart, try-reload-or-rest
art, force-reload, status, condrestart). For other actions, please try to use systemctl.
[root@ip-172-31-22-16 ec2-user]# service httpd status
Redirecting to /bin/systemctl status httpd.service
● httpd.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
     Active: active (running) since Mon 2024-02-12 06:05:03 UTC; 19s ago
       Docs: man:httpd.service(8)
   Main PID: 25888 (httpd)
     Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec:   0 B/sec"
      Tasks: 177 (limit: 1114)
     Memory: 13.1M
        CPU: 75ms
     CGroup: /system.slice/httpd.service
             ├─25888 /usr/sbin/httpd -DFOREGROUND
             ├─25889 /usr/sbin/httpd -DFOREGROUND
             ├─25890 /usr/sbin/httpd -DFOREGROUND
             ├─25891 /usr/sbin/httpd -DFOREGROUND
             └─25892 /usr/sbin/httpd -DFOREGROUND

Feb 12 06:05:03 ip-172-31-22-16.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Feb 12 06:05:03 ip-172-31-22-16.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Feb 12 06:05:04 ip-172-31-22-16.ec2.internal httpd[25888]: Server configured, listening on: port 80
[root@ip-172-31-22-16 ec2-user]#
```

Now we will enter in the website path

```
Dash: cd/var/www/html: No such file or directory
[root@ip-172-31-22-16 ec2-user]# cd  /var/www/html
[root@ip-172-31-22-16 html]#
```

```
root@ip-172-31-22-91:/var/

[root@ip-172-31-22-91 html]# vi index.html
[root@ip-172-31-22-91 html]# [root@ip-172-31-22-91 html]# cat index.html
Hello everyone
[root@ip-172-31-22-91 html]#
```

Now create index.html file using vi command:- vi index.html

```
root@ip-172-31-22-91:/var/

Hello everyone
~
~
~
~
~
~
~
```

Now we will check our changes are made on IP or not.

```
Instances | EC2 | us-east-1          ✕        18.205.22.24          ✕     +

←  →  C   ⚠ Not secure   18.205.22.24
```

Hello everyone

S2) Now creating instance 2 with linux machine and also disable auto assign public IP
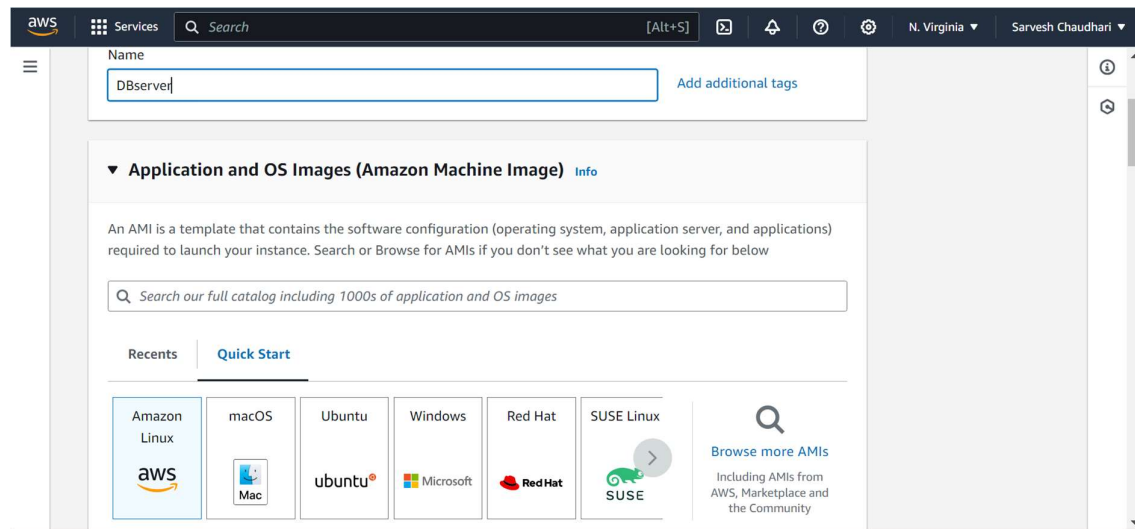
Selecting same AZ and disable Auto-assign public IP
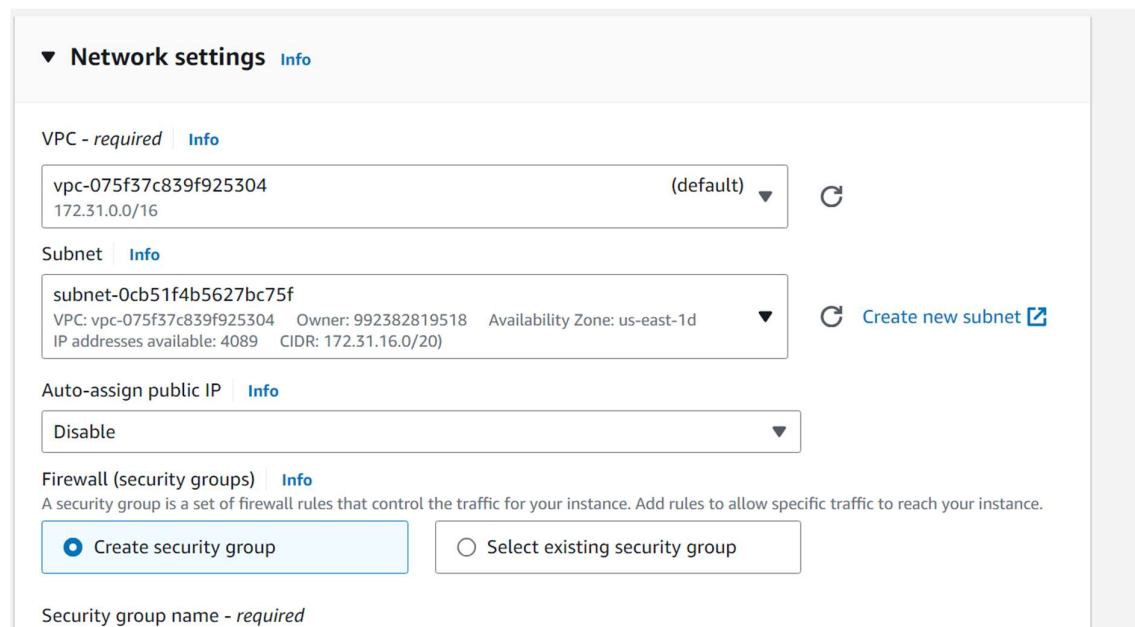
Now creating instance.

Now using VI command to create key file in Instance 1

Directly using key file with location does not make sense as our key file is at our desktop function but our command line is opened on Instance1 VM .

So to use this key file first we open key file on notepad then copy the text and paste this text file in new created key file.

Now by click escape then :wq + enter .

-----BEGIN RSA PRIVATE KEY-----
MIIEowIBAAKCAQEAnA6nMcRBpRRtgH/zBSJ52zUACiT3aCFNfeSyS6BM5HyLckMm
l7bt81R46dbdwJMtg6Bo1PY/sdS8aDQ1tUKrlqTht4gMUrB1hs8M7vKfMbfbBVql
WM/J7821Ted7MIpuDXAxDhbF2fSGQMsJjbe4ITH4IcKSrw5+ohRk7nEDGVraqv0C
iBzG8SG1BbmZUip/z5B4BJ9ruYobg7CvuHdMXtlNDxve/pszkgY5MKIcjYBgvCzj
bhae5BQKnfLaznM43EcR3tZCWdyY3Gzjp6R7X2gifXUS8HGjdrQutXBH+n4BlcWS
S3F7UbwWc7vr2NHC6O4fB9nUN6KNBIm6hpGagQIDAQABAoIBAGtpWoLShixNZyEu
7+H03NKYJDLXRsKRSXkBVAbhiospfgFjXsjFy/nThnXMwkyuAIG8gusxop2Pwy4l
4WGlRd0mF4XvSiwP8JSdJlXBAPmDhmik/3Glc2Ruvf+k+BFs9lqhgeIkooFl4JHw
Ld8xOLcAYb064yNCYr7EMsQ7XNqxruxsKS7F6NIHrVRd5oZ2VOcO56NkGL0ogvM5
rHAn6dh6qUk0miwnrkioMgs0B3WtO5IurL79ycu6Lg6DNwdyxWuYaIw50L0NhZ34
xpL4rgMkMxN7MY3QMH6EZ93n+x0qAu+DOIRSmFxo4hZB6RpUhfoeiA7bIyIjidXa
bS7huNECgYEAyoaCWQJYcfU3mfD9L9ljR8gdTlXZxLeukRC2SlOEQ99SClp1jjDA
5nWcZMT/Iahhk5U61Bt11rOudRq+SjlbbVt3QJDjZ+NUbOaOKSiyLVQYcB+xm5Wb
Rgf6fiuwAk5uaQCjsYpX3+pYAhgX+WW4Hdf2tKnhDty0xiVOOEVZks8CgYEAxUMt
GzFelouKlVN2opu7pRmQ/9qzPbZqMZk/ouGThLdY8LubsfANgEEs0RBpdo+OWO0L
iVqx/CSpFj8Se1Gu6Tpnxxus0KmehGJMqqy3Umdf0xpftjso0yrpgdoADm8UVwkw
0Klth269MJSNUVa28FP6JmRmlmEiPTo9VJKhka8CgYBF/0XezKiz+QIV+OoGNyHQ
FJ/MCm8PRErXZucYGHSE4BAB8/DcCo0fF1XMnSduAjp2PgPueO7oG4AWh/9qtxeZ
WxqC/Y8Yv77VQ3etUZsBfyZS2SEPm0vlj6xJHd/dbC1LrCTlneFwSBPR5XGjhjty
VMe092AHOs5eC1ZUq+KgkQKBgQCxA7kkX8cbnRi9K2qYPNvEKg8eKWkTBfCBlZ2v
UnGIdOdRD2mF4X6cCuBmsy2QgP4h+oWRulthgpxhJDQ3iXNGQ20BFWqczLk83uEh
f1/6iF1LGK2u36Og6y8joTbPvQopmEu/02pAUDVhtMyjowcC3rjpXstYQs3w16RV
kkd+bQKBgGvttO2dihkFctQ0g33aqE3LIS+J+37ZDkClWwR3kmWkH2uUU45D/ilj
mGULnwBQpDBH6nxB1lYAWOdaeNtgMdcdrAxN6s/nXgaSt1JSYIfqwSW49Vyw2WF+
hL/tf2xEE9URkptJz4llxJiW+L6P/jn82aYC1MrQYNGhOC5SWB21
-----END RSA PRIVATE KEY-----
~
~
~
"dbkey.pem" 27L, 1675B   27,29   All

Now we will give permission to our new created file using chmod command

Also accessing instance 2 using same command line with command format

ssh -i our key file user_name@Private IP adress

Here we can see that Private IP address is opened in command line