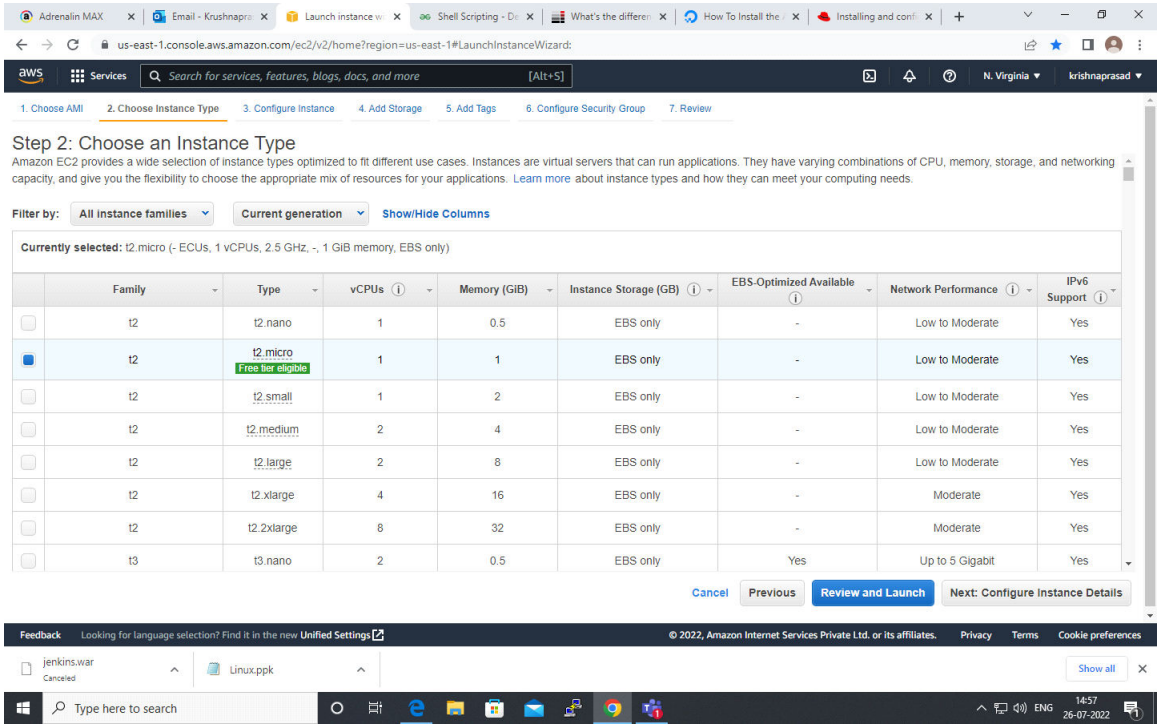
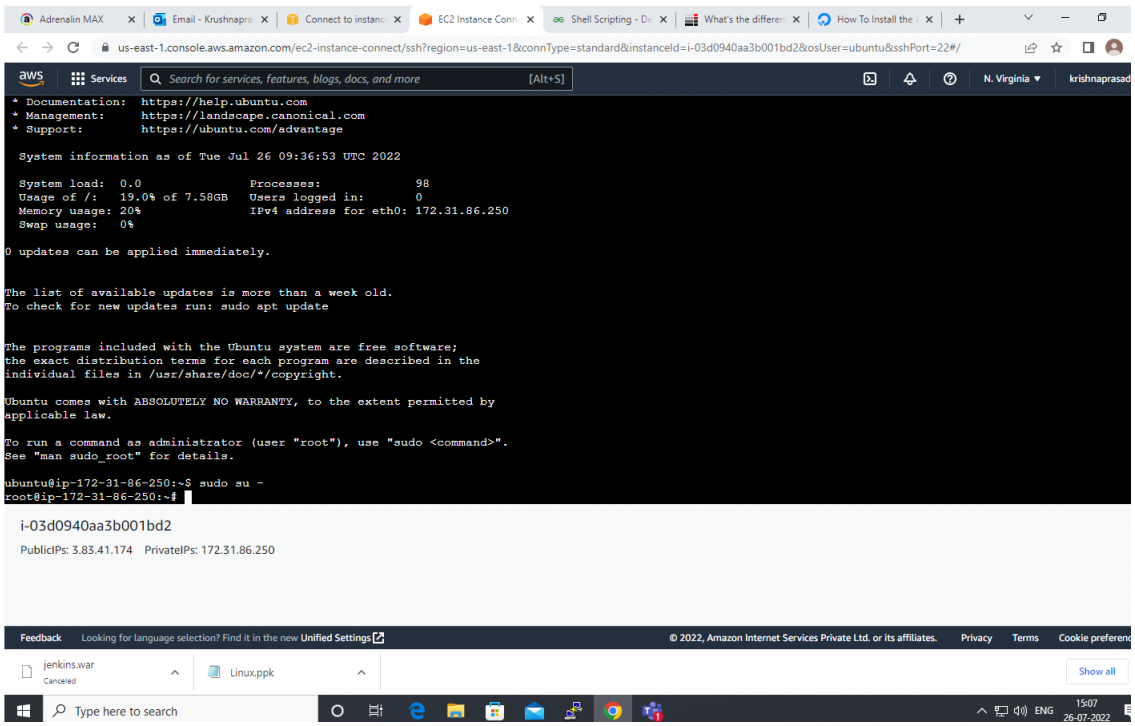
Shell Scripting

A shell script is a text file that contains a sequence of commands for a UNIX-based operating system. It is called a shell script because it combines a sequence of commands, that would otherwise have to be typed into the keyboard one at a time, into a single script. The shell is the operating system's command-line interface (CLI) and interpreter for the set of commands that are used to communicate with the system.

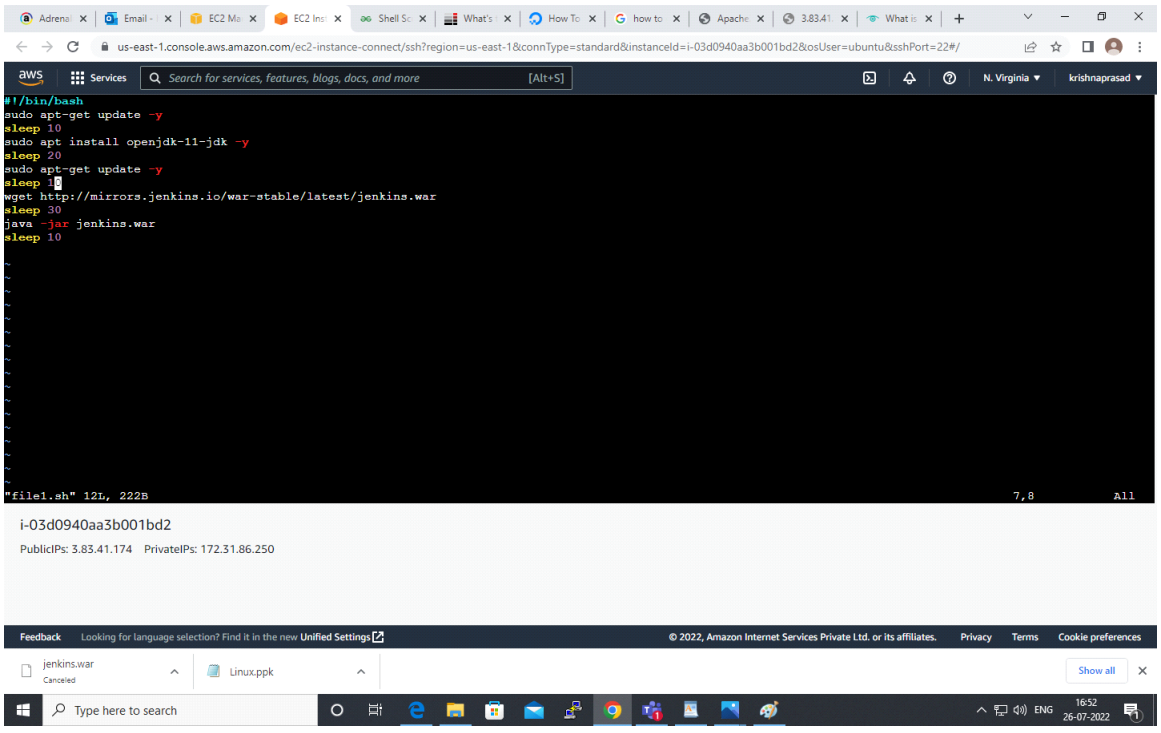
Step 1:Launch A EC2 Instance.



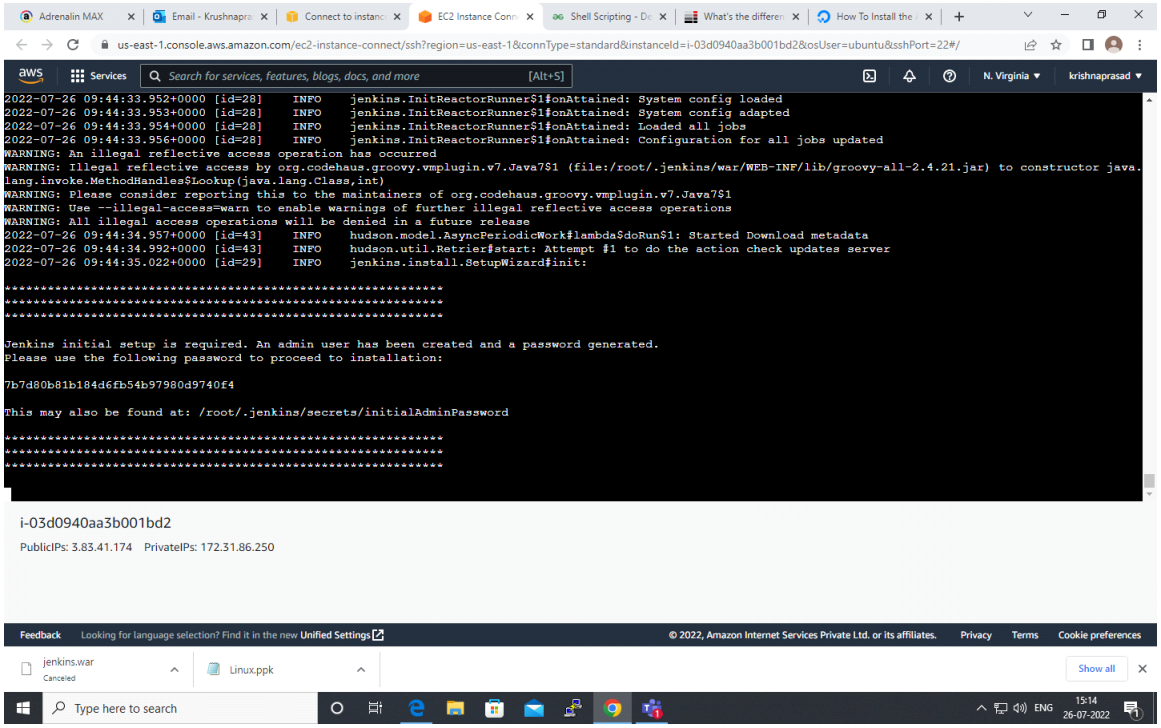
Step 2: Connect to the instance and switch to root user using SUDO SU- command.



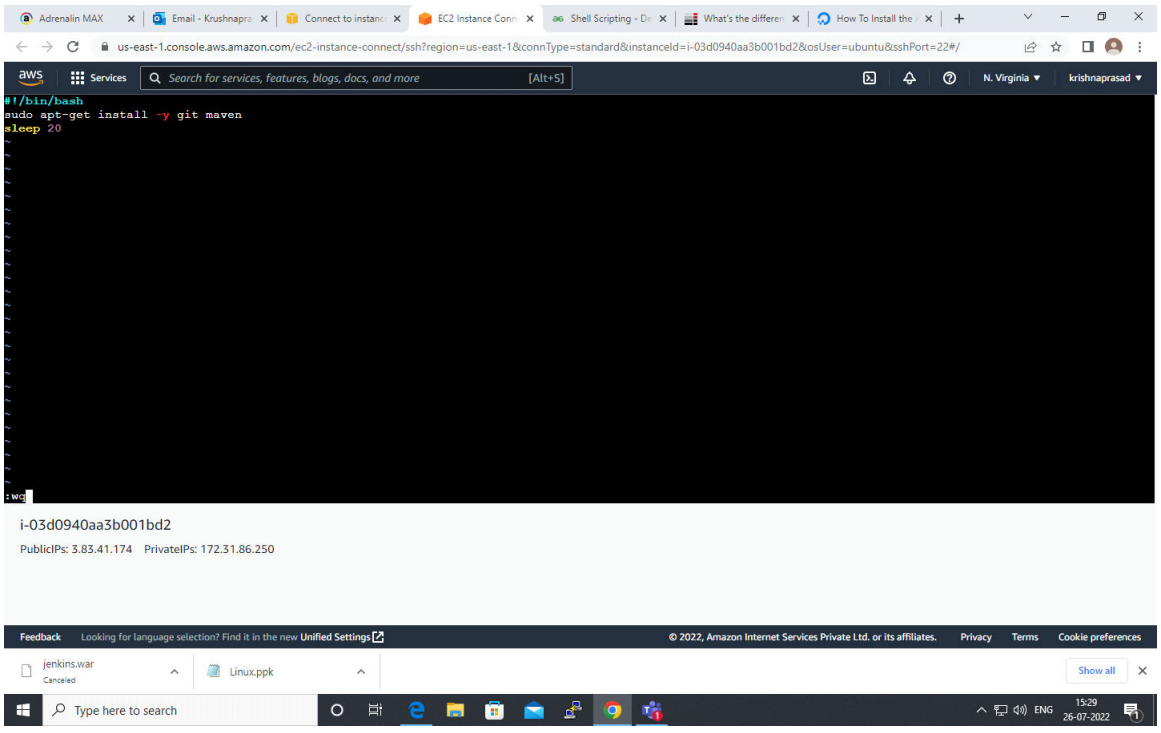
Step 3: Create a file using touch command and enter into the file by VIM. After that enter the commands for Jenkins Installation.



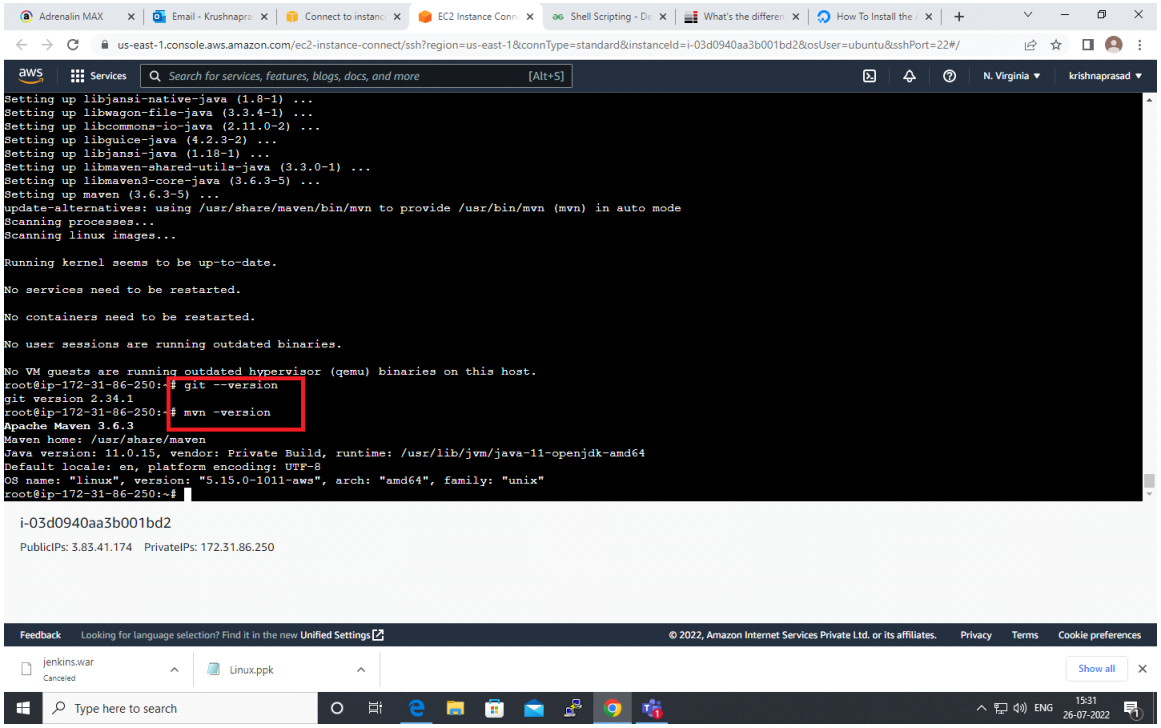
Step 4:After executing it displays as below.



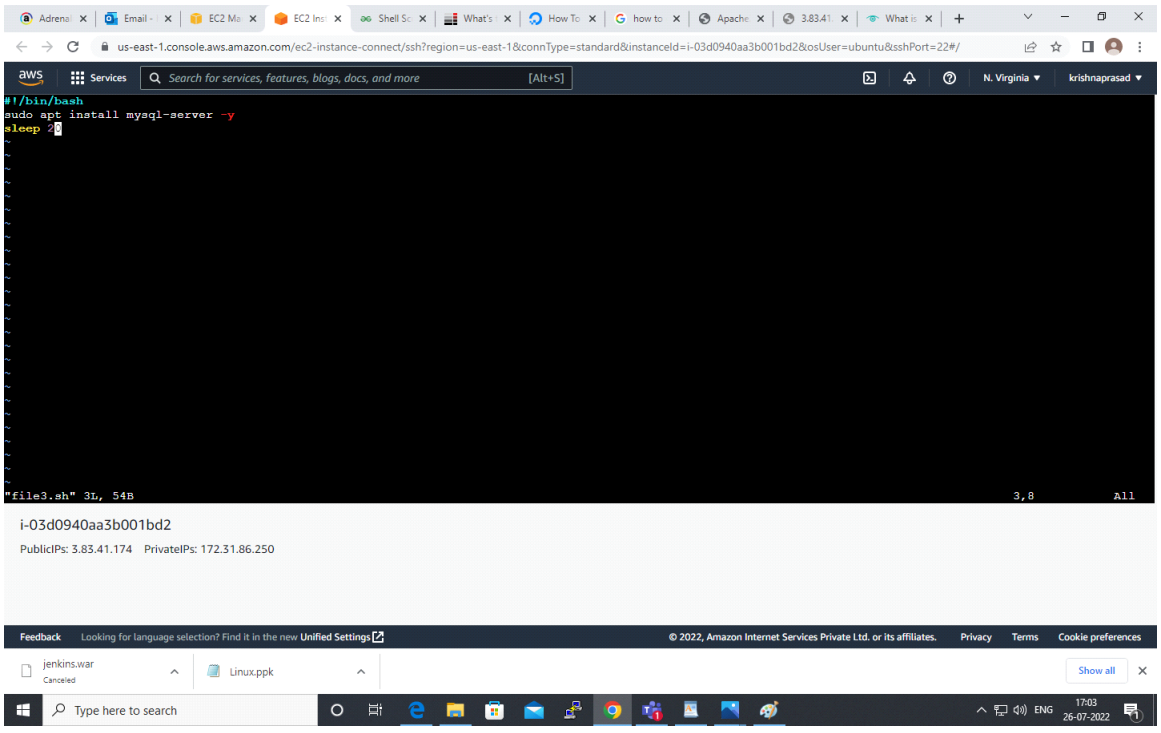
Step 5:Now, create another file for Git and Maven.Give the commands required for installation of Git and Maven.



Step 6: To check installed versions use Git --version and Mvn -version commands.



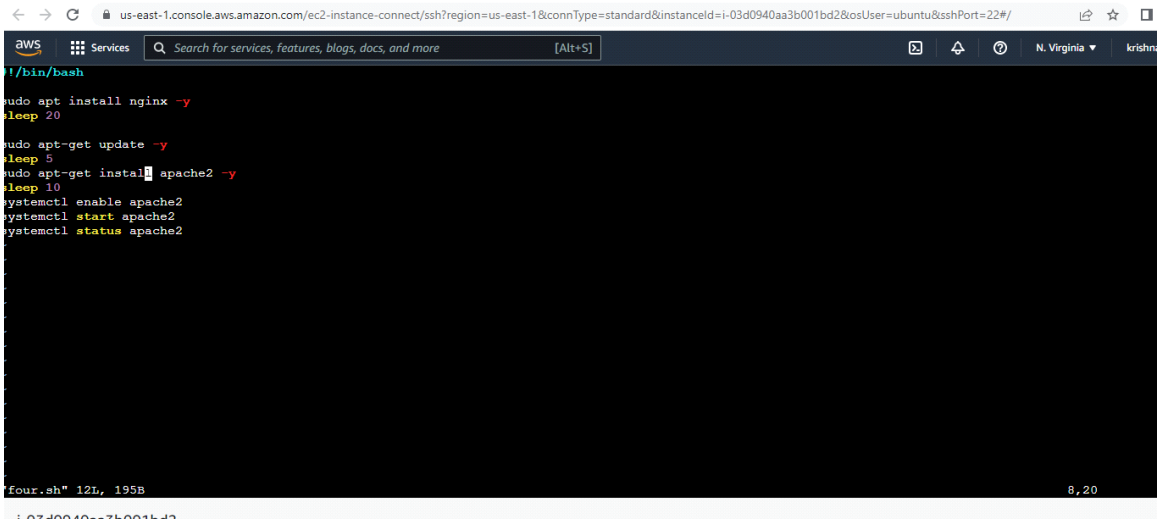
Step 7:Create another file for Mysql server.Enter, the commands for installing the mysql server.



Step 8:After execution of command it appears as below.

```
root@ip-172-31-86-250:/etc/nginx/sites-enabled# systemctl restart nginx
Job for nginx.service failed because the control process exited with error code.
See "systemctl status nginx.service" and "journalctl -xeu nginx.service" for details.
root@ip-172-31-86-250:/etc/nginx/sites-enabled# vi default
root@ip-172-31-86-250:/etc/nginx/sites-enabled# systemctl restart nginx
root@ip-172-31-86-250:/etc/nginx/sites-enabled# ls
default
root@ip-172-31-86-250:/etc/nginx/sites-enabled# sudo su -
root@ip-172-31-86-250:~# ls
file1.sh  file2.sh  file3.sh  four.sh  jenkins.war  snap
root@ip-172-31-86-250:~# vim file1.sh
root@ip-172-31-86-250:~# vim file2.sh
root@ip-172-31-86-250:~# vim file3.sh
root@ip-172-31-86-250:~# ./file3.sh
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
mysql-server is already the newest version (8.0.29-0ubuntu0.22.04.2).
0 upgraded, 0 newly installed, 0 to remove and 46 not upgraded.
root@ip-172-31-86-250:~#
```

Step 9:Give the commands for installation of Nginx and Apache.



Step 10:Now,check that the Ngnix webserver is installed.

```
root@ip-172-31-86-250:/etc/nginx/sites-enabled# vi default
root@ip-172-31-86-250:/etc/nginx/sites-enabled# systemctl restart nginx
Job for nginx.service failed because the control process exited with error code.
See "systemctl status nginx.service" and "journalctl -xeu nginx.service" for details.
root@ip-172-31-86-250:/etc/nginx/sites-enabled# vi default
root@ip-172-31-86-250:/etc/nginx/sites-enabled# systemctl restart nginx
root@ip-172-31-86-250:/etc/nginx/sites-enabled# ls
default
root@ip-172-31-86-250:/etc/nginx/sites-enabled# sudo su -
root@ip-172-31-86-250:~# ls
file1.sh  file2.sh  file3.sh  four.sh  jenkins.war  snap
root@ip-172-31-86-250:~# vim file1.sh
root@ip-172-31-86-250:~# vim file2.sh
root@ip-172-31-86-250:~# vim file3.sh
root@ip-172-31-86-250:~# ./file3.sh
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
mysql-server is already the newest version (8.0.29-0ubuntu0.22.04.2).
0 upgraded, 0 newly installed, 0 to remove and 46 not upgraded.
root@ip-172-31-86-250:~# vim four.sh
root@ip-172-31-86-250:~# chmod +x four.sh
root@ip-172-31-86-250:~# ./four.sh
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nginx is already the newest version (1.18.0-6ubuntu14.1).
0 upgraded, 0 newly installed, 0 to remove and 46 not upgraded.
```

Coclusion: Installation of Jenkins,Mysql,Ngnix, Git Maven and Apache through ShellScripting