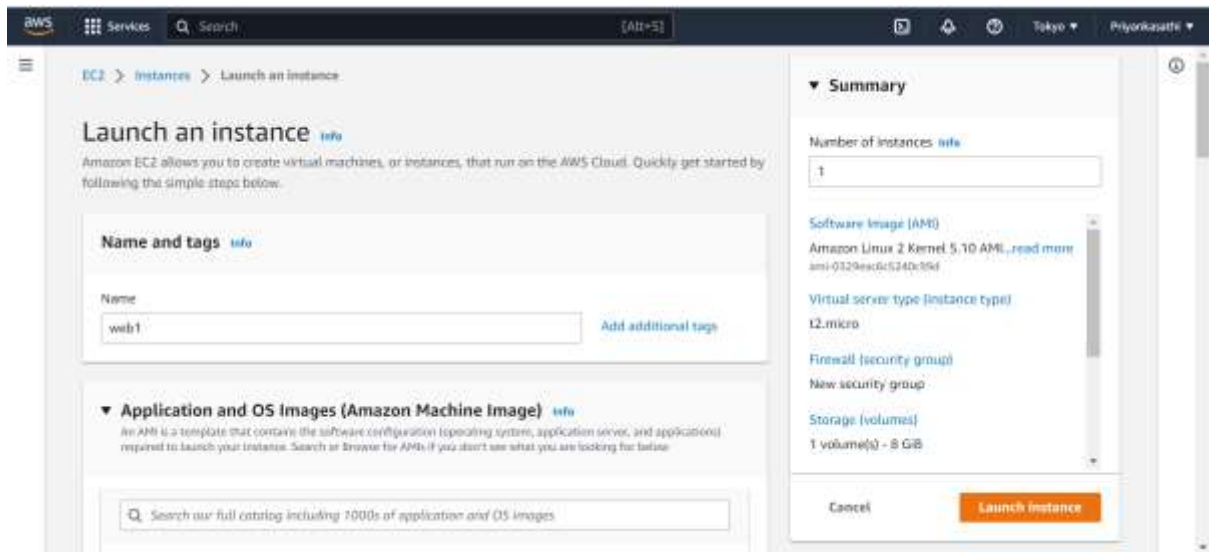
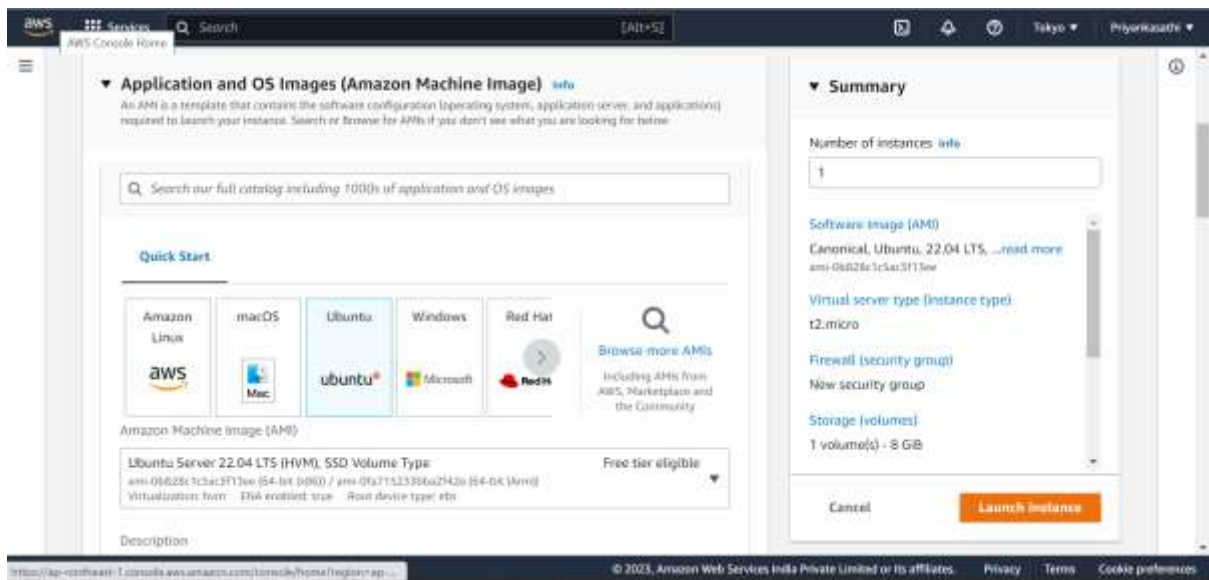


ASSIGNMENT 4

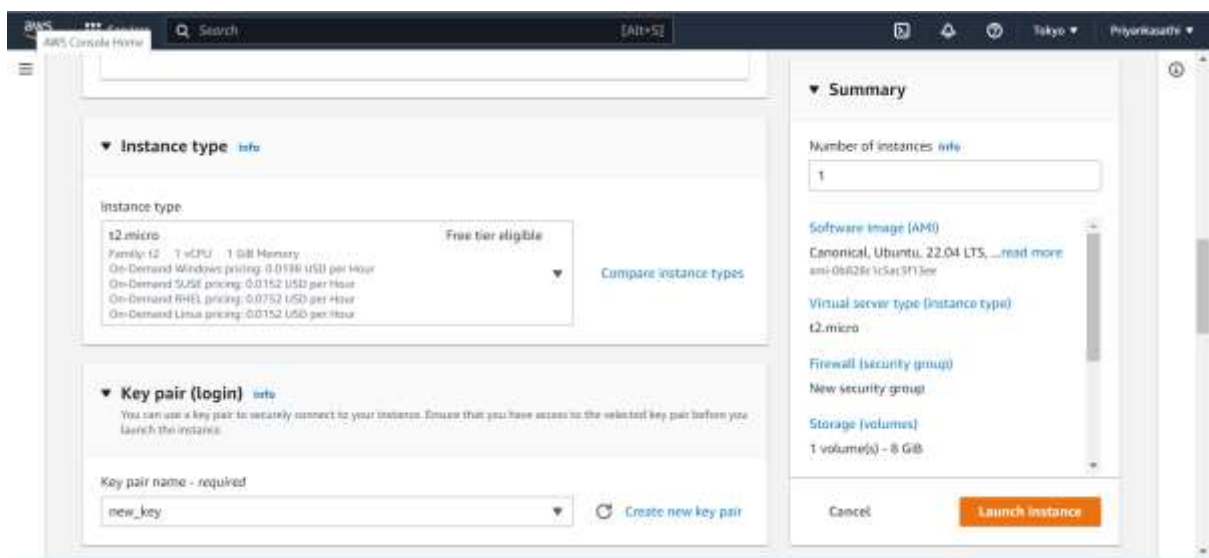
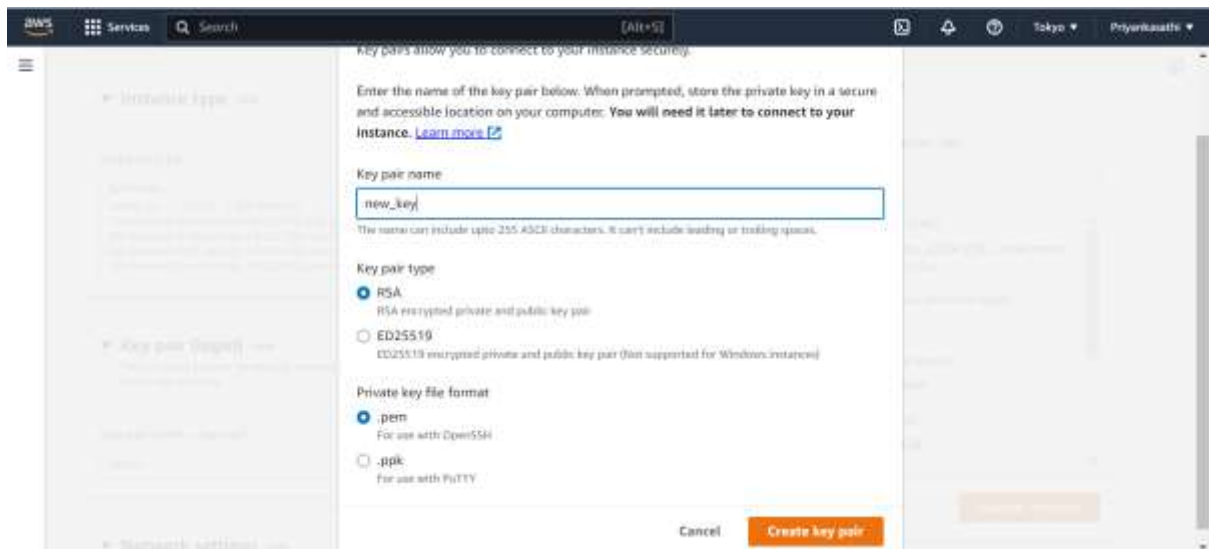
STEP 1: Creating EC2 Instance with Ubuntu AMI



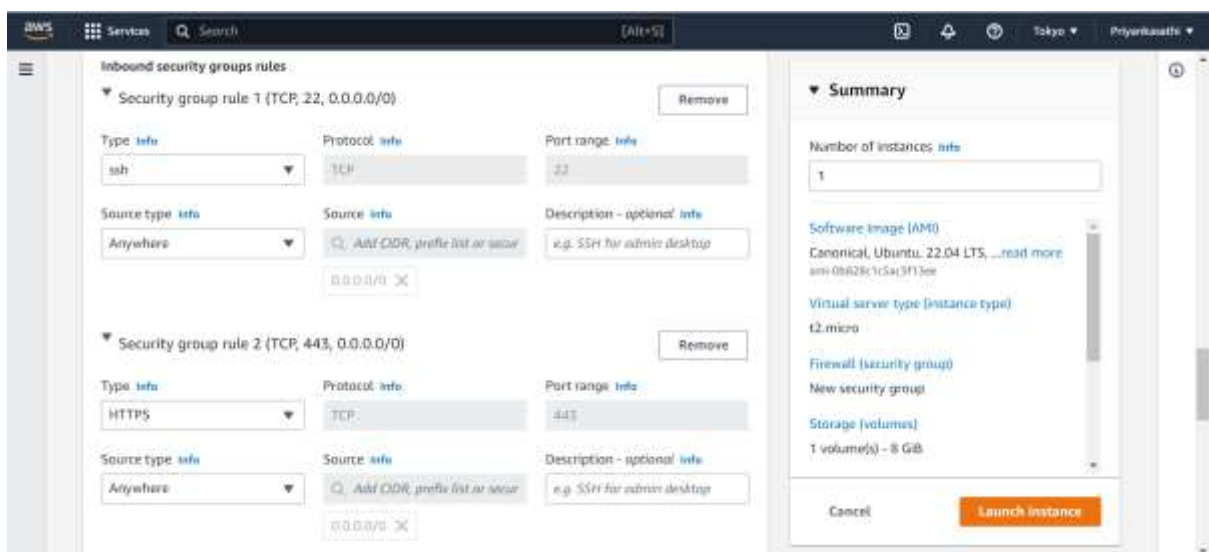
Select the UBUNTU AMI

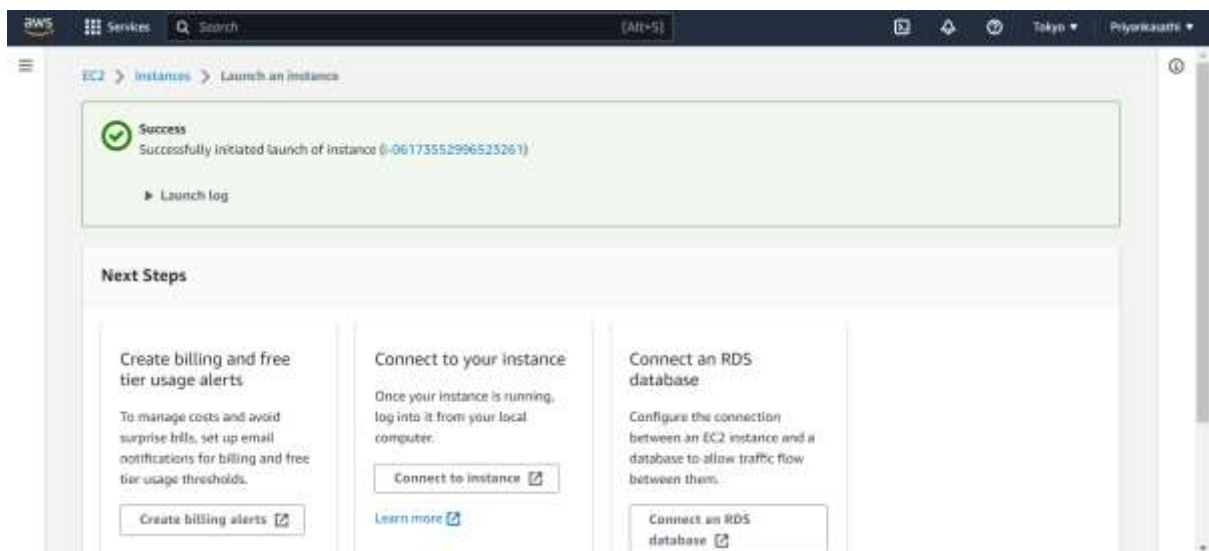
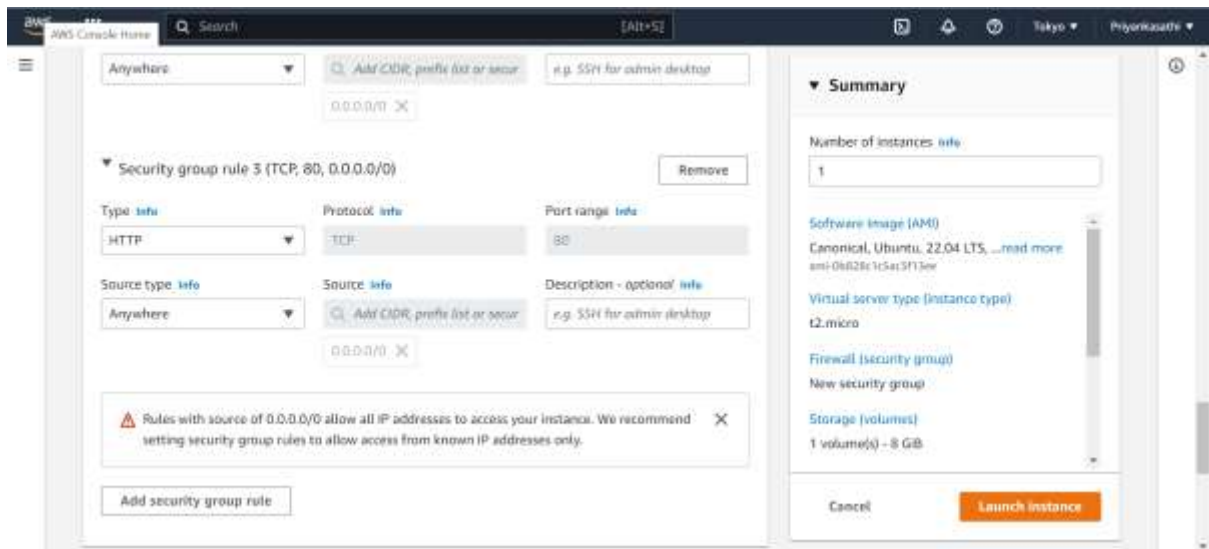


STEP 2: Creating Key pair for SSH Access



STEP 3: Creating Security Group with SSH and HTTP/HTTPS Ports Enabled.



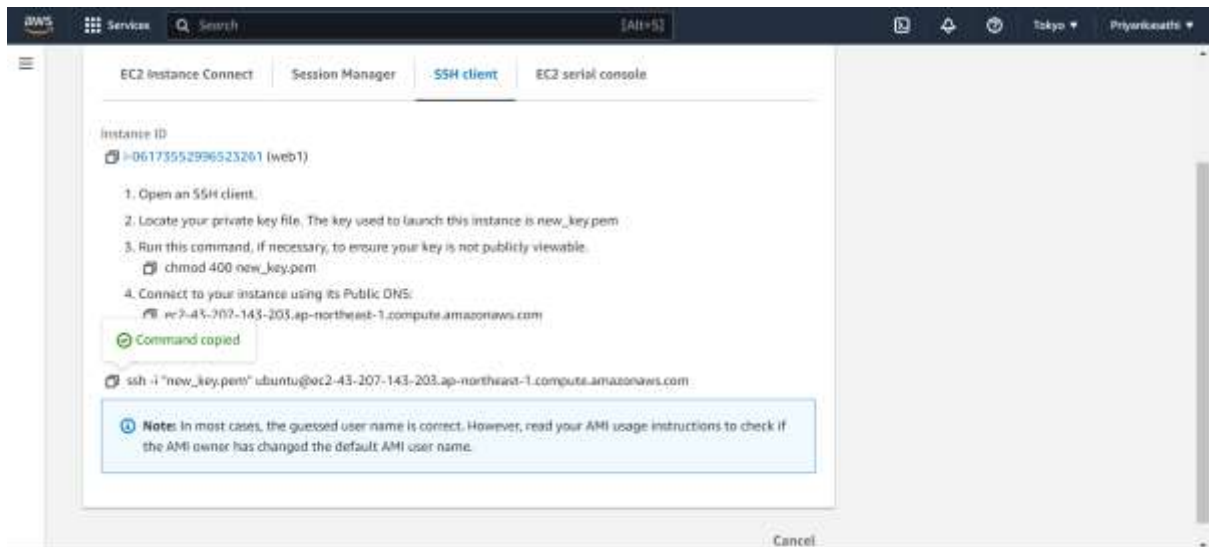


Hence our EC2 Instance get created.

STEP 4: SSH Created EC2 Instance to local Machine.

Now we have to connect with it using the local machine using the pem key

Open the CMD and now paste the public DNS there.



```
Microsoft Windows [Version 10.0.19044.2884]
(c) Microsoft Corporation. All rights reserved.

C:\Users\User>ssh -i "new_key.pem" ubuntu@ec2-43-207-143-203.ap-northeast-1.compute.amazonaws.com
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:   https://landscape.canonical.com
 * Support:      https://ubuntu.com/advantage

System information as of Thu Mar  2 04:38:19 UTC 2023

System load:  0.0               Processes:           0
Usage of /:   28.6% of 7.57GB   Users logged in:    0
Memory usage: 19%              IPV4 address for eth0: 173.31.43.128
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Thu Mar  2 04:35:42 2023 from 223.185.88.57
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
```

Now we got connected with the instance

STEP 5: Install Nodejs in the Ubuntu machine.

Now we would update using the “sudo apt update”.

Now we give the “sudo apt install nodejs” command to install the nodejs files

```

ubuntu@ip-172-31-43-129:~$ sudo apt update
Hit:1 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy InRelease
Get:2 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates InRelease [119 kB]
Get:3 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports InRelease [107 kB]
Get:4 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/universe amd64 Packages [14.1 MB]
Get:5 http://security.ubuntu.com/ubuntu jessy-security InRelease [118 kB]
Get:6 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/universe Translation-en [962 kB]
Get:7 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/universe amd64 c-n-f Metadata [288 kB]
Get:8 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/multiverse amd64 Packages [217 kB]
Get:9 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/multiverse Translation-en [222 kB]
Get:10 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/multiverse amd64 c-n-f Metadata [8372 B]
Get:11 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/main amd64 Packages [958 kB]
Get:12 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/main Translation-en [293 kB]
Get:13 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/main amd64 c-n-f Metadata [13.6 kB]
Get:14 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/restricted amd64 Packages [688 kB]
Get:15 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/restricted Translation-en [188 kB]
Get:16 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/restricted amd64 c-n-f Metadata [584 B]
Get:17 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/universe amd64 Packages [674 kB]
Get:18 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/universe Translation-en [171 kB]
Get:19 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/universe amd64 c-n-f Metadata [17.8 kB]
Get:20 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/multiverse amd64 Packages [9696 B]
Get:21 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/multiverse Translation-en [3268 B]
Get:22 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-updates/multiverse amd64 c-n-f Metadata [444 B]
Get:23 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/main amd64 Packages [48.7 kB]
Get:24 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/main Translation-en [5889 B]
Get:25 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/main amd64 c-n-f Metadata [192 B]
Get:26 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:27 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/universe amd64 Packages [19.5 kB]
Get:28 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/universe Translation-en [34.8 kB]
Get:29 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/universe amd64 c-n-f Metadata [392 B]
Get:30 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:31 http://security.ubuntu.com/ubuntu jessy-security/main amd64 Packages [648 kB]
Get:32 http://security.ubuntu.com/ubuntu jessy-security/main Translation-en [195 kB]
Get:33 http://security.ubuntu.com/ubuntu jessy-security/main amd64 c-n-f Metadata [8524 B]
Get:34 http://security.ubuntu.com/ubuntu jessy-security/restricted amd64 Packages [582 kB]
Get:35 http://security.ubuntu.com/ubuntu jessy-security/restricted Translation-en [90.4 kB]
Get:36 http://security.ubuntu.com/ubuntu jessy-security/universe amd64 Packages [694 kB]
Get:37 http://security.ubuntu.com/ubuntu jessy-security/universe Translation-en [138 kB]
Get:38 http://security.ubuntu.com/ubuntu jessy-security/universe amd64 c-n-f Metadata [13.4 kB]
Get:39 http://security.ubuntu.com/ubuntu jessy-security/multiverse amd64 Packages [4960 B]
Get:40 http://security.ubuntu.com/ubuntu jessy-security/multiverse Translation-en [990 B]

```

```

Fetched 28.1 MB in 5s (5684 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
36 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-43-129:~$ sudo apt install nodejs
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  javascript-common libc-ares2 libjs-highlight.js libnode72 nodejs-doc
Suggested packages:
  apache2 | lighttpd | httpd rpm
The following NEW packages will be installed:
  javascript-common libc-ares2 libjs-highlight.js libnode72 nodejs nodejs-doc
0 upgraded, 6 newly installed, 0 to remove and 36 not upgraded.
Need to get 15.7 MB of archives.
After this operation, 53.9 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/main amd64 javascript-common all 11+nmu1 [5956 B]
Get:2 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/universe amd64 libjs-highlight.js all 9.18.5+dfsg1-1 [367 kB]
Get:3 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/main amd64 libc-ares2 amd64 1.18.1-1build1 [44.9 kB]
Get:4 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/universe amd64 libnode72 amd64 12.22.9-dfsg-1ubuntu3 [18.8 MB]
Get:5 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/universe amd64 nodejs-doc all 12.22.9-dfsg-1ubuntu3 [2400 kB]
Get:6 http://ap-northeast-1.ec2.archive.ubuntu.com/ubuntu jessy/universe amd64 nodejs amd64 12.22.9-dfsg-1ubuntu3 [112 kB]
Fetched 15.7 MB in 8s (61.6 MB/s)
Selecting previously unselected package javascript-common.
(Reading database ... 63605 files and directories currently installed.)
Preparing to unpack .../0-javascript-common_11+nmu1_all.deb ...
Unpacking javascript-common (11+nmu1) ...
Selecting previously unselected package libjs-highlight.js.
Preparing to unpack .../1-libjs-highlight.js_9.18.5+dfsg1-1_all.deb ...
Unpacking libjs-highlight.js (9.18.5+dfsg1-1) ...
Selecting previously unselected package libc-ares2:amd64.
Preparing to unpack .../2-libc-ares2_1.18.1-1build1_amd64.deb ...
Unpacking libc-ares2:amd64 (1.18.1-1build1) ...
Selecting previously unselected package libnode72:amd64.
Preparing to unpack .../3-libnode72_12.22.9-dfsg-1ubuntu3_amd64.deb ...
Unpacking libnode72:amd64 (12.22.9-dfsg-1ubuntu3) ...
Selecting previously unselected package nodejs-doc.
Preparing to unpack .../4-nodejs-doc_12.22.9-dfsg-1ubuntu3_all.deb ...

```

STEP 6: Check the status of nodejs.

We check the status/version using the command “node -v”.

```
Selecting previously unselected package libnode72:amd64.  
Preparing to unpack .../3-libnode72_12.22.9-dfsg-1ubuntu3_amd64.deb ...  
Unpacking libnode72:amd64 (12.22.9-dfsg-1ubuntu3) ...  
Selecting previously unselected package nodejs-doc.  
Preparing to unpack .../4-nodejs-doc_12.22.9-dfsg-1ubuntu3_all.deb ...  
Unpacking nodejs-doc (12.22.9-dfsg-1ubuntu3) ...  
Selecting previously unselected package nodejs.  
Preparing to unpack .../5-nodejs_12.22.9-dfsg-1ubuntu3_amd64.deb ...  
Unpacking nodejs (12.22.9-dfsg-1ubuntu3) ...  
Setting up javascript-common (11+nmu1) ...  
Setting up libc-ares2:amd64 (1.18.1-1bu181) ...  
Setting up libnode72:amd64 (12.22.9-dfsg-1ubuntu3) ...  
Setting up libjs-highlight.js (9.18.5-dfsg1-1) ...  
Setting up nodejs (12.22.9-dfsg-1ubuntu3) ...  
update-alternatives: using /usr/bin/nodejs to provide /usr/bin/js (js) in auto mode  
Setting up nodejs-doc (12.22.9-dfsg-1ubuntu3) ...  
Processing triggers for man-db (2.10.2-1) ...  
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...  
Scanning processes...  
Scanning linux images...  
  
Running kernel seems to be up-to-date.  
  
No services need to be restarted.  
  
No containers need to be restarted.  
  
No user sessions are running outdated binaries.  
  
No VM guests are running outdated hypervisor (qemu) binaries on this host.  
ubuntu@172-31-43-129:~$ node -v  
v12.22.9  
ubuntu@172-31-43-129:~$
```