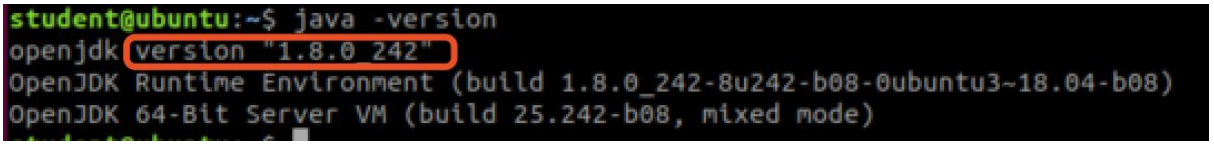
We are going to install **Jenkins** on **Linux**, the following guide is build on a VM-based **ubuntu 18.04 LTS** system.

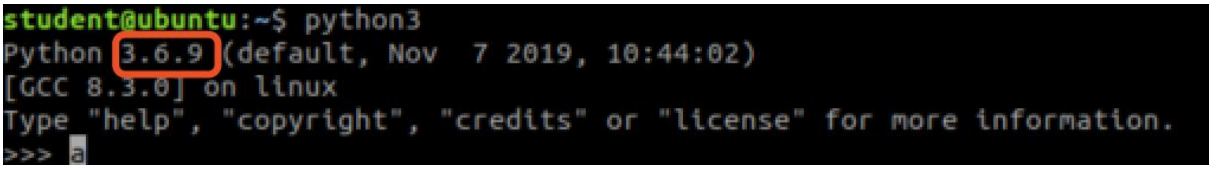
Pre-installation check:

In order to play with Jenkin, you have to make sure **Java8** is installed. In our project, we also need **python 3.7**
There twos are pre-installed, therefore, we won't re-iterate it here again.

To check if you have Java8 or not, type **java -version** in your terminal



To check if you have python3 or not, type **python3** in your terminal:



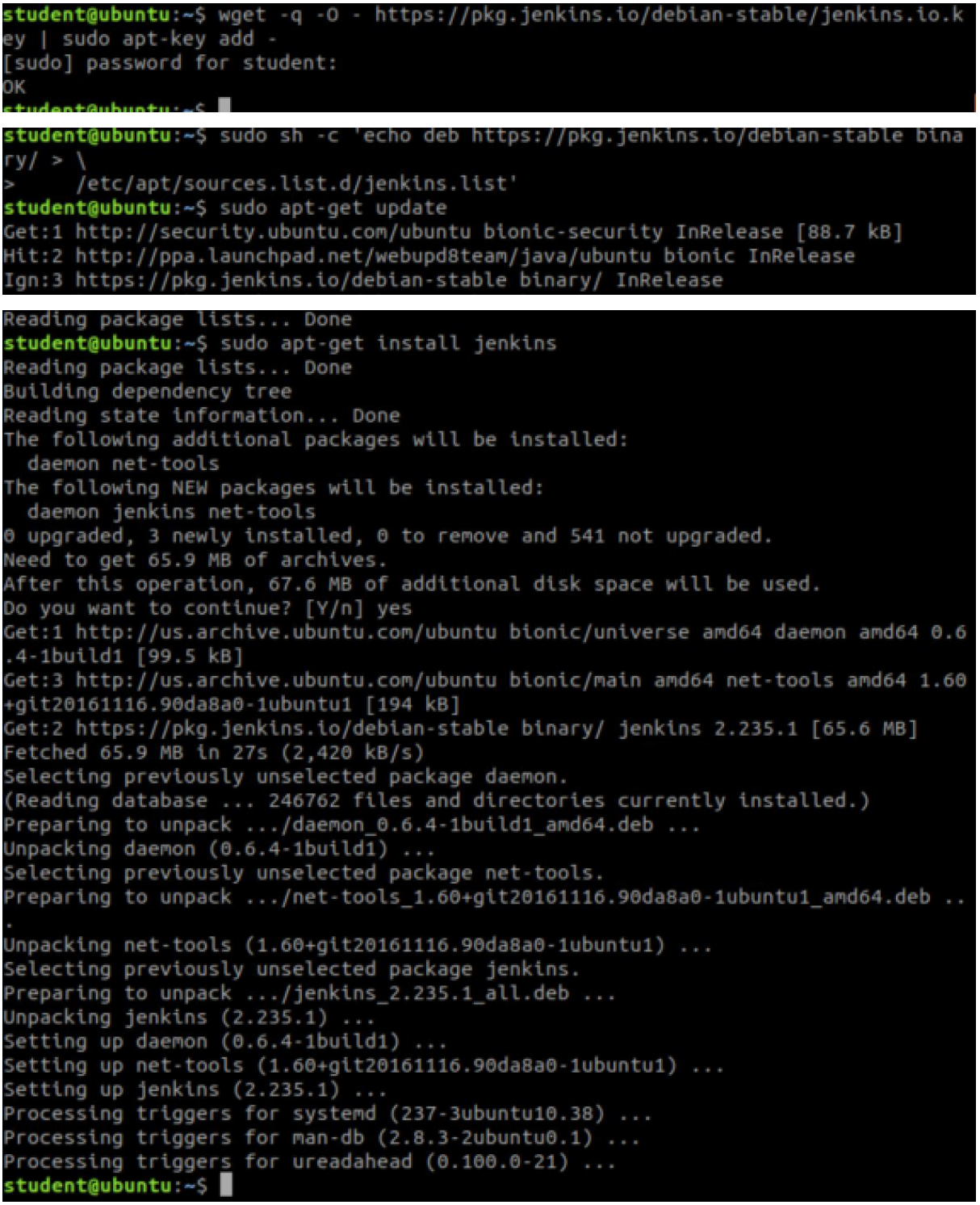
Install jenkin on ubuntu:

The details description can be found from Jenkins official website here:
https://www.jenkins.io/doc/book/installing/#debianubuntu
or by the youtube tutorials here:
https://www.youtube.com/watch?v=rgai3yzRsA0

However, you just need to follow the following main steps we extracted from the site.

```
wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -
sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ > \
    /etc/apt/sources.list.d/jenkins.list'
sudo apt-get update
sudo apt-get install jenkins
```

Snapshot of running above command:



```
student@ubuntu:~$ wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.k
ey | sudo apt-key add -
[sudo] password for student:
OK
student@ubuntu:~$
student@ubuntu:~$ sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable bina
ry/ > \
>     /etc/apt/sources.list.d/jenkins.list'
student@ubuntu:~$ sudo apt-get update
Get:1 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Hit:2 http://ppa.launchpad.net/webupd8team/java/ubuntu bionic InRelease
Ign:3 https://pkg.jenkins.io/debian-stable binary/ InRelease
Reading package lists... Done
student@ubuntu:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  daemon net-tools
The following NEW packages will be installed:
  daemon jenkins net-tools
0 upgraded, 3 newly installed, 0 to remove and 541 not upgraded.
Need to get 65.9 MB of archives.
After this operation, 67.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] yes
Get:1 http://us.archive.ubuntu.com/ubuntu bionic/universe amd64 daemon amd64 0.6
.4-1build1 [99.5 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 net-tools amd64 1.60
+git20161116.90da8a0-1ubuntu1 [194 kB]
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.235.1 [65.6 MB]
Fetched 65.9 MB in 27s (2,420 kB/s)
Selecting previously unselected package daemon.
(Reading database ... 246762 files and directories currently installed.)
Preparing to unpack .../daemon_0.6.4-1build1_amd64.deb ...
Unpacking daemon (0.6.4-1build1) ...
Selecting previously unselected package net-tools.
Preparing to unpack .../net-tools_1.60+git20161116.90da8a0-1ubuntu1_amd64.deb ..
.
Unpacking net-tools (1.60+git20161116.90da8a0-1ubuntu1) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.235.1_all.deb ...
Unpacking jenkins (2.235.1) ...
Setting up daemon (0.6.4-1build1) ...
Setting up net-tools (1.60+git20161116.90da8a0-1ubuntu1) ...
Setting up jenkins (2.235.1) ...
Processing triggers for systemd (237-3ubuntu10.38) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
student@ubuntu:~$
```

Now, we are **done** with Jenkins Installation! Let's check if it works

Start Jenkins Service

To see if Jenkins is correctly installed, let us start the Jenkins Service.

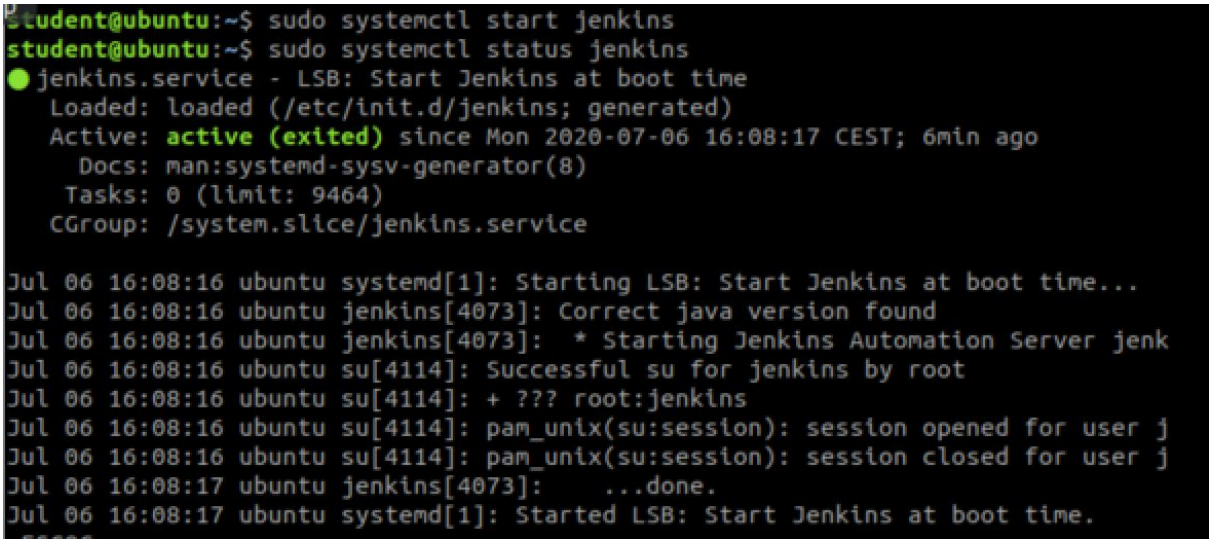
You can start the Jenkins service with the command:

```
sudo systemctl start jenkins
```

You can check the status of the Jenkins service using the command:

```
sudo systemctl status jenkins
```

Snapshot of running above command:

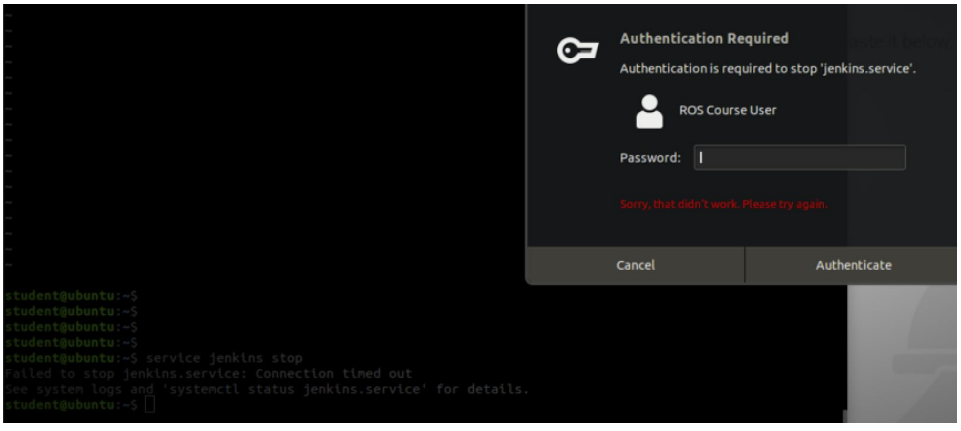


The detailed descriptions of start, check and stop Jenkins service can be found from Jenkins official website here: *https://www.jenkins.io/doc/book/installing/*

Stop Jenkins Service

You can stop the Jenkins service with the command:

```
service jenkins stop
```



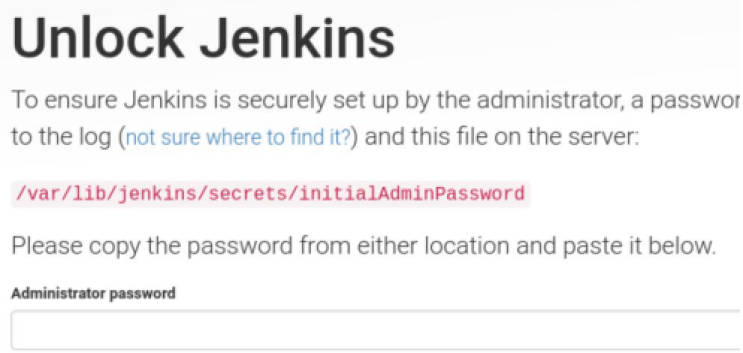
type your user password to stop the service

If you check the status of the Jenkins service, you will see below:

```
student@ubuntu:~$ service jenkins stop
student@ubuntu:~$ sudo systemctl status jenkins
● jenkins.service - LSB: Start Jenkins at boot time
   Loaded: loaded (/etc/init.d/jenkins; generated)
   Active: inactive (dead) since Mon 2020-07-06 16:39:02 CEST; 2s ago
     Docs: man:systemd-sysv-generator(8)
  Process: 2284 ExecStop=/etc/init.d/jenkins stop (code=exited, status=0/SUCCESS)
  Process: 818 ExecStart=/etc/init.d/jenkins start (code=exited, status=0/SUCCESS)
```

Connect to localhost to see Jenkins Dashboard

Authentification for first time connection:
If you are the first time to connect to Jenkins dashboard, it will ask your password.

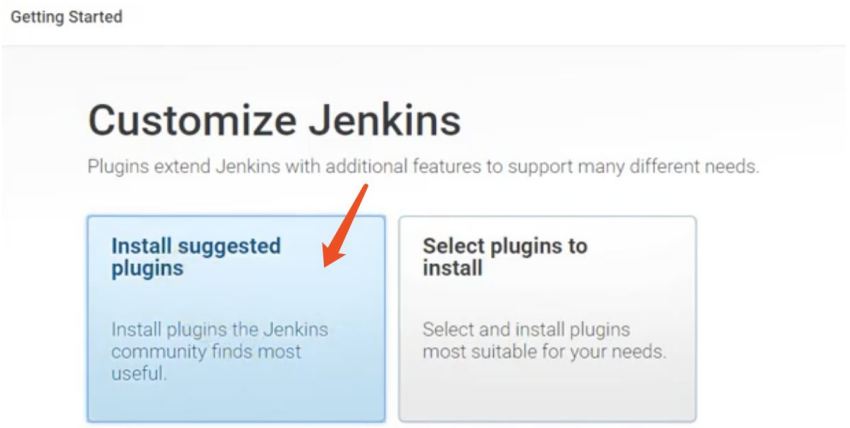


Just follow what it instructed by typing the command at the terminal:

```
student@ubuntu:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
[sudo] password for student:
f14e1ee0552b4a378a1069be2786496a
```

Configuration on Jenkins

Once it succeed, you will be able to see this:



Now the plugins are getting to be installed: