

JENKINS INSTALLATION STEPS ON UBUNTU:14.04 & 16.04

Step1: Install Oracle java 8 on ubuntu 14.04

1. Add apt repository

```
sudo apt-add-repository ppa:webupd8team/java
```

Type in user password when it asks and hit Enter to continue.

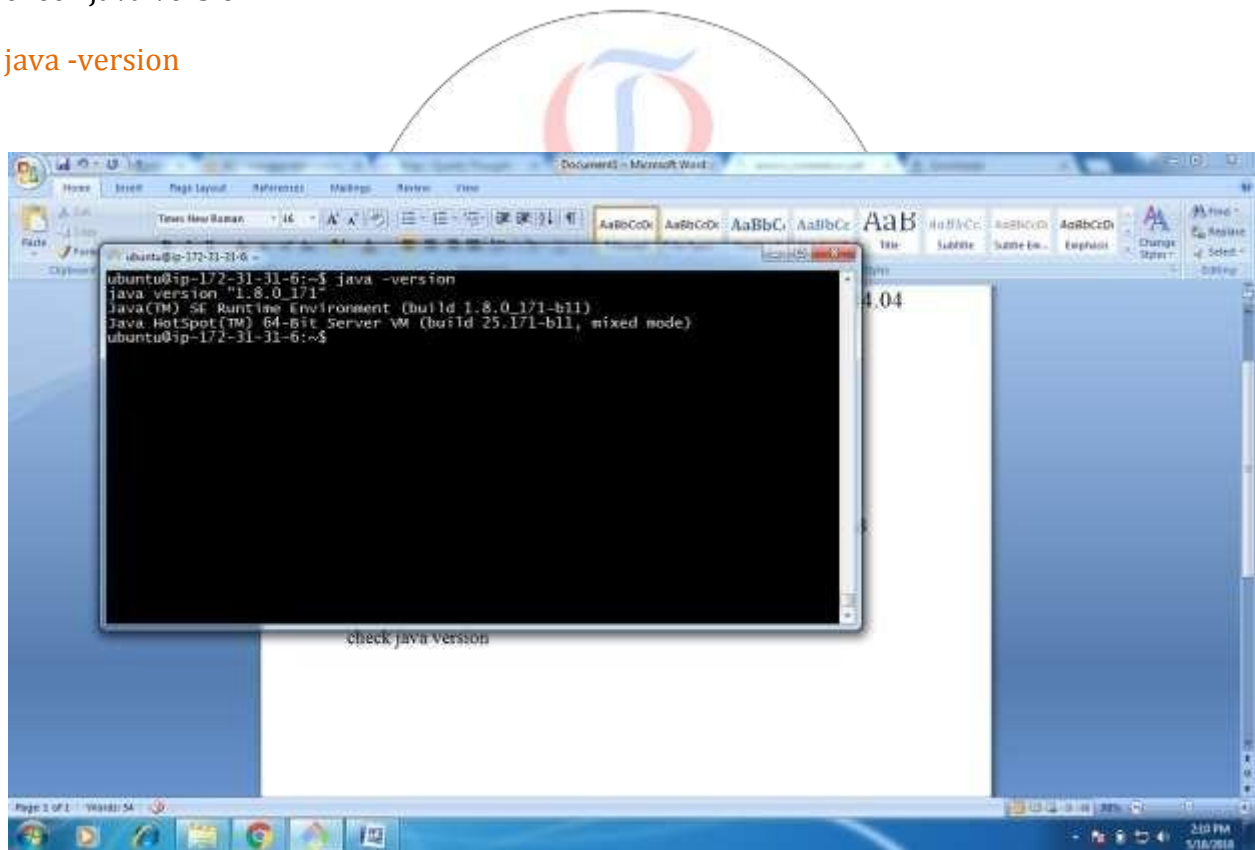
2. After that, update system package cache and install Oracle java 8

```
sudo apt-get update
```

```
sudo apt-get install oracle-java8-installer
```

check java version

```
java -version
```



Step3: To Set JAVA_HOME / PATH for all user, You need to setup global config in /etc/profile OR /etc/bash.bashrc file for all users:

open /etc/profile

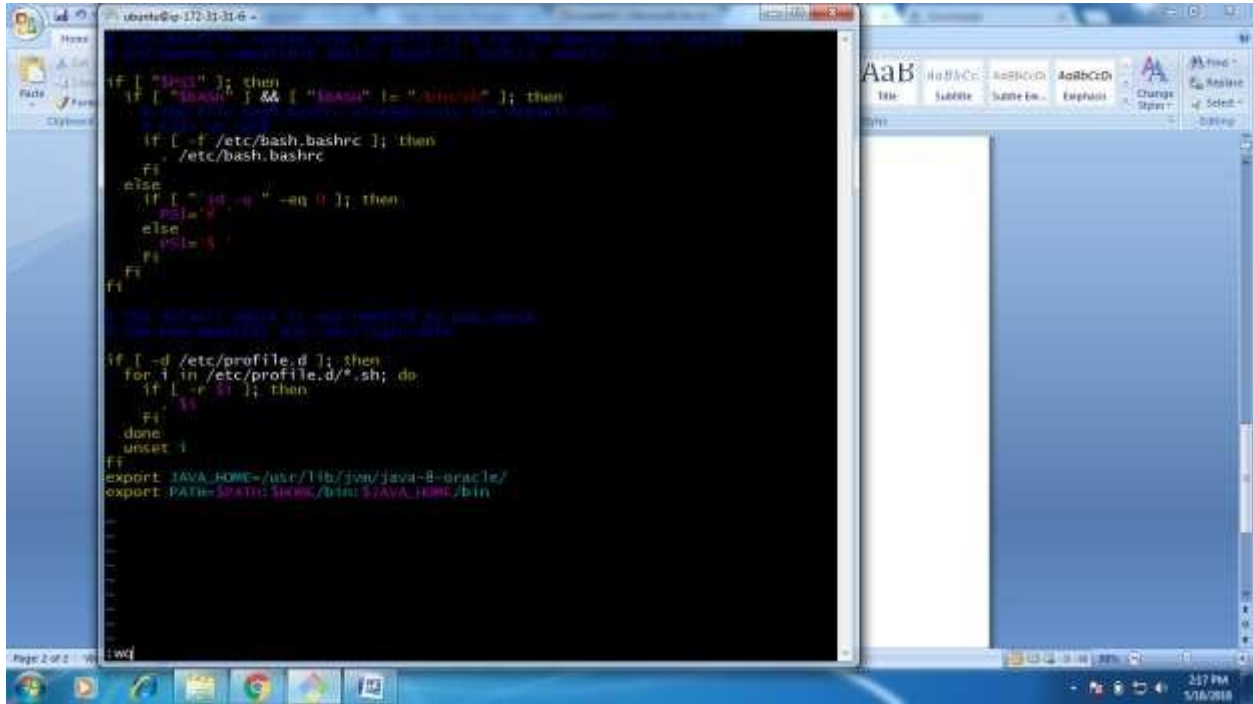
```
sudo vi /etc/profile
```

add below steps end of file

```
export JAVA_HOME=/usr/lib/jvm/java-8-oracle/
```

```
export PATH=$PATH:$HOME/bin:$JAVA_HOME/bin
```

To save and exit press **Esc** and **:wq**



step4: check java path

```
java -version
```

Step5: Install maven

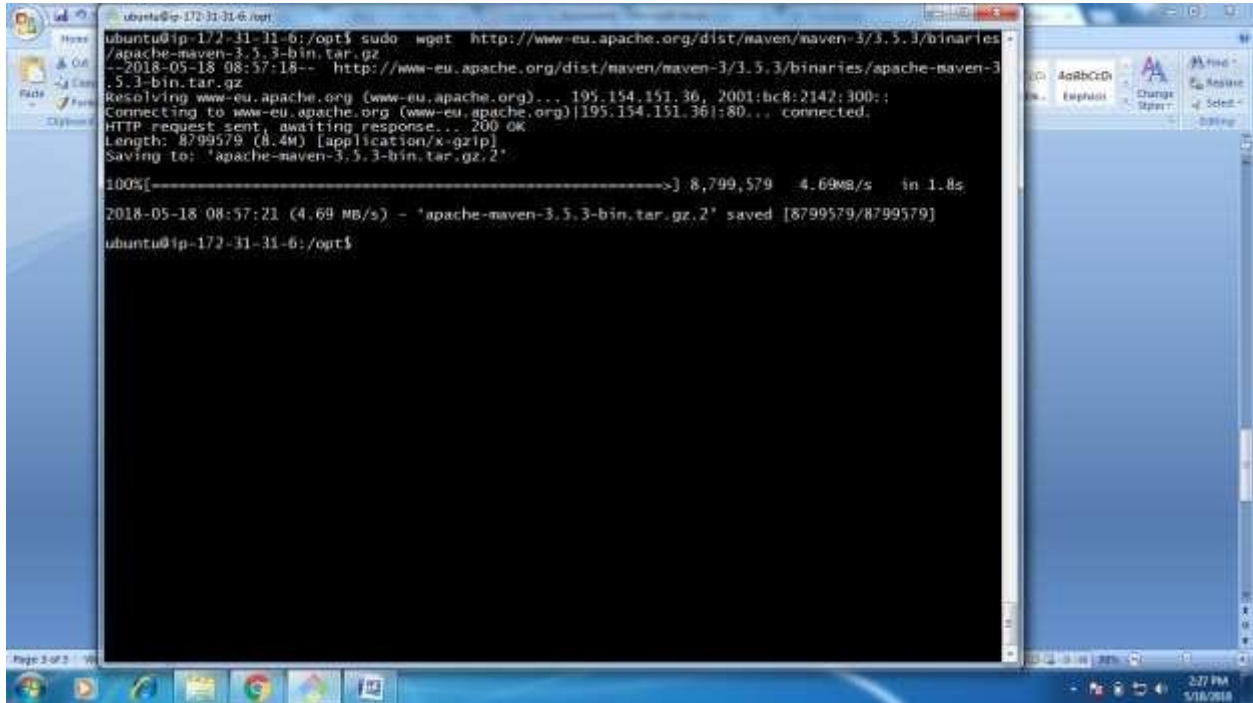
1. Download Apache Maven

Go to /opt directory

```
cd /opt
```

Download maven tar file

```
sudo wget http://www-eu.apache.org/dist/maven/maven-3/3.5.4/binaries/apache-maven-3.5.4-bin.tar.gz
```



```
ubuntu@ip-172-31-31-6:~$ sudo wget http://www-eu.apache.org/dist/maven/maven-3/3.5.3/binaries/apache-maven-3.5.3-bin.tar.gz
--2018-05-18 08:57:18-- http://www-eu.apache.org/dist/maven/maven-3/3.5.3/binaries/apache-maven-3.5.3-bin.tar.gz
Resolving www-eu.apache.org (www-eu.apache.org)... 195.154.151.36, 2001:bc8:2142:300::
Connecting to www-eu.apache.org (www-eu.apache.org)|195.154.151.36|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 8799579 (8.4M) [application/x-gzip]
Saving to: 'apache-maven-3.5.3-bin.tar.gz.2'

100%[-----] 8,799,579 4.69MB/s in 1.8s
2018-05-18 08:57:21 (4.69 MB/s) - 'apache-maven-3.5.3-bin.tar.gz.2' saved [8799579/8799579]
ubuntu@ip-172-31-31-6:/opt$
```

Extract Apache Maven:

Using below command:

```
sudo tar xzf apache-maven-3.5.4-bin.tar.gz
```

After run below command:

```
sudo ln -s /opt/apache-maven-3.5.4/bin/mvn /usr/bin/mvn
```



```
ubuntu@ip-172-31-31-6:/opt$ ls
apache-maven-3.5.3-bin.tar.gz
ubuntu@ip-172-31-31-6:/opt$ sudo tar xzf apache-maven-3.5.3-bin.tar.gz
ubuntu@ip-172-31-31-6:/opt$ ls
apache-maven-3.5.3  apache-maven-3.5.3-bin.tar.gz
ubuntu@ip-172-31-31-6:/opt$ |
```

Setup Environment Variables for maven

Go to /etc/profile

add bellow steps

```
sudo vi /etc/profile
```

```
M2_HOME=/opt/apache-maven-3.5.4
```

```
PATH=$PATH:$M2_HOME/bin
```

```
export M2_HOME
```

```
export PATH
```





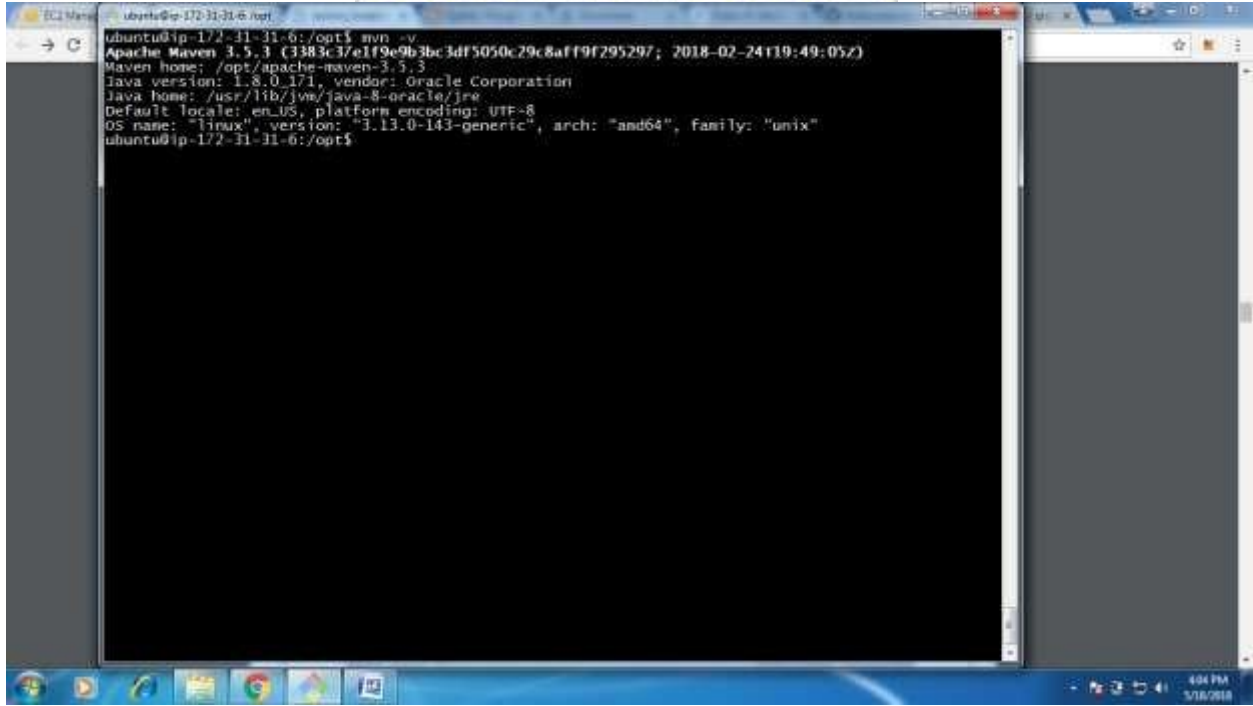
```
if [ "$SSH" ]; then
  if [ "$SSH" ] && [ "$SSH" != "ssh" ]; then

    if [ -f /etc/bash.bashrc ]; then
      . /etc/bash.bashrc
    fi
    else
      if [ "$id" = "root" ]; then
        PATH="/usr/bin:/usr/sbin:/usr/local/bin:/usr/local/sbin"
      fi
      else
        PATH="/usr/bin:/usr/sbin:/usr/local/bin:/usr/local/sbin:/usr/bin:/usr/sbin:/usr/local/bin:/usr/local/sbin"
      fi
    fi
  fi

  if [ -d /etc/profile.d ]; then
    for i in /etc/profile.d/*.sh; do
      if [ -r $i ]; then
        . $i
      fi
    done
    unset i
  fi

  export JAVA_HOME=/usr/lib/jvm/java-8-oracle/
  export PATH=$PATH:$JAVA_HOME/bin
  M2_HOME=/opt/apache-maven-3.5.2
  PATH=$PATH:$M2_HOME/bin
  export M2_HOME
  export PATH
fi
```

step6: Check maven version



```
ubuntu@ip-172-31-31-6:/opt$ mvn -v
Apache Maven 3.5.3 (3383c37e1f9e9b3bc3df5050c29c8aff9f295297; 2018-02-24T19:49:05Z)
Maven home: /opt/apache-maven-3.5.3
Java version: 1.8.0_171, vendor: Oracle Corporation
Java home: /usr/lib/jvm/java-8-oracle/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "3.13.0-143-generic", arch: "amd64", family: "unix"
ubuntu@ip-172-31-31-6:/opt$
```

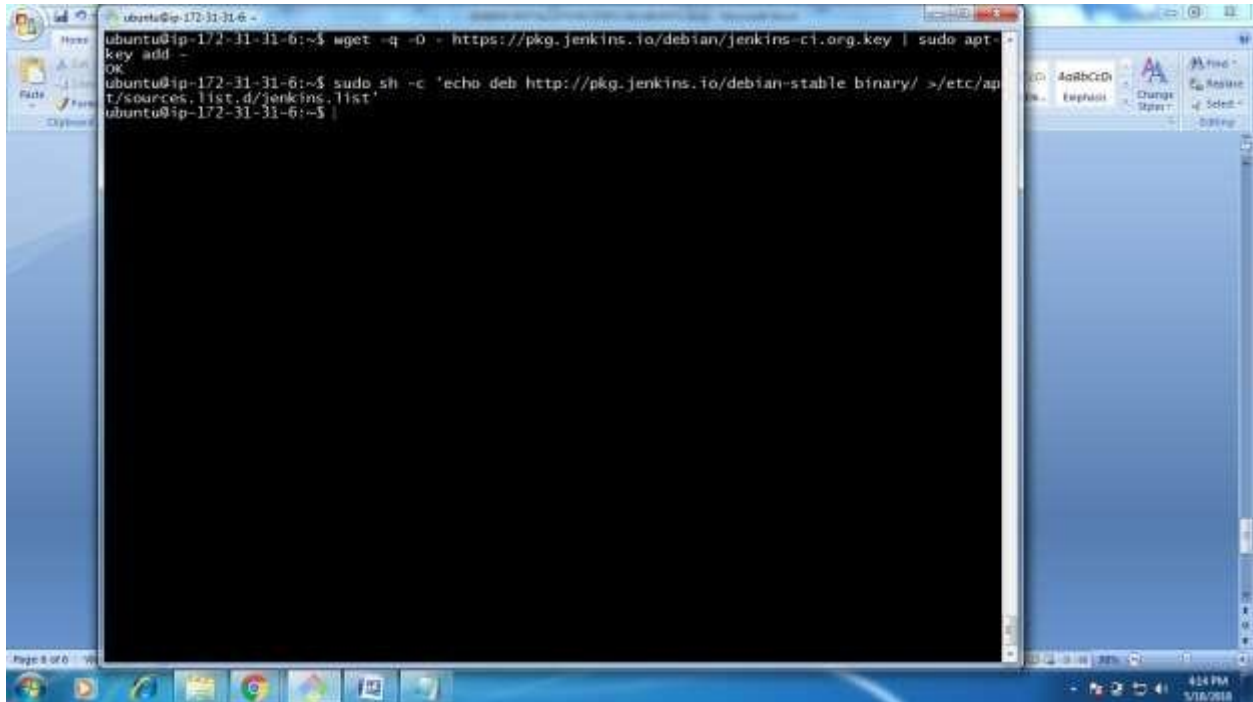
Step7: Install Git

```
sudo apt-get install git
```

Step8: JENKINS Installation On ubuntu:14.04

Add apt repo

```
wget -q -O - https://pkg.jenkins.io/debian/jenkins-ci.org.key | sudo apt-key add -  
sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ | sudo tee  
/etc/apt/sources.list.d/jenkins.list'
```



```
sudo apt-get update
```

```
sudo apt-get install jenkins
```

Ameerpet / Kondapur
Hyderabad

```
ubuntu@ip-172-31-31-6:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
 daemon
The following NEW packages will be installed:
 daemon jenkins
0 upgraded, 2 newly installed, 0 to remove and 39 not upgraded.
Need to get 72.6 MB of archives.
After this operation, 74.9 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-west-2-ec2.archive.ubuntu.com/ubuntu/trusty/universe daemon amd64 0.6.4-1 [98.2 kB]
Get:2 http://pkg.jenkins.io/debian-stable/binary/ jenkins 2.107.3 [72.5 MB]
Fetched 72.6 MB in 12s (5.952 kB/s)
Selecting previously unselected package daemon.
(Reading database ... 52633 files and directories currently installed.)
Preparing to unpack ../daemon_0.6.4-1_amd64.deb ...
Unpacking daemon (0.6.4-1) ...
Selecting previously unselected package jenkins.
Preparing to unpack ../jenkins_2.107.3_all.deb ...
Unpacking jenkins (2.107.3) ...
Processing triggers for man-db (2.6.7.1-1ubuntu1) ...
Processing triggers for ureadahead (0.100.0-16) ...
Setting up daemon (0.6.4-1) ...
Setting up jenkins (2.107.3) ...
Correct java version found
* Starting Jenkins Automation Server jenkins
Processing triggers for ureadahead (0.100.0-16) ...
ubuntu@ip-172-31-31-6:~$
```

Check your Jenkins status

`sudo service jenkins status`

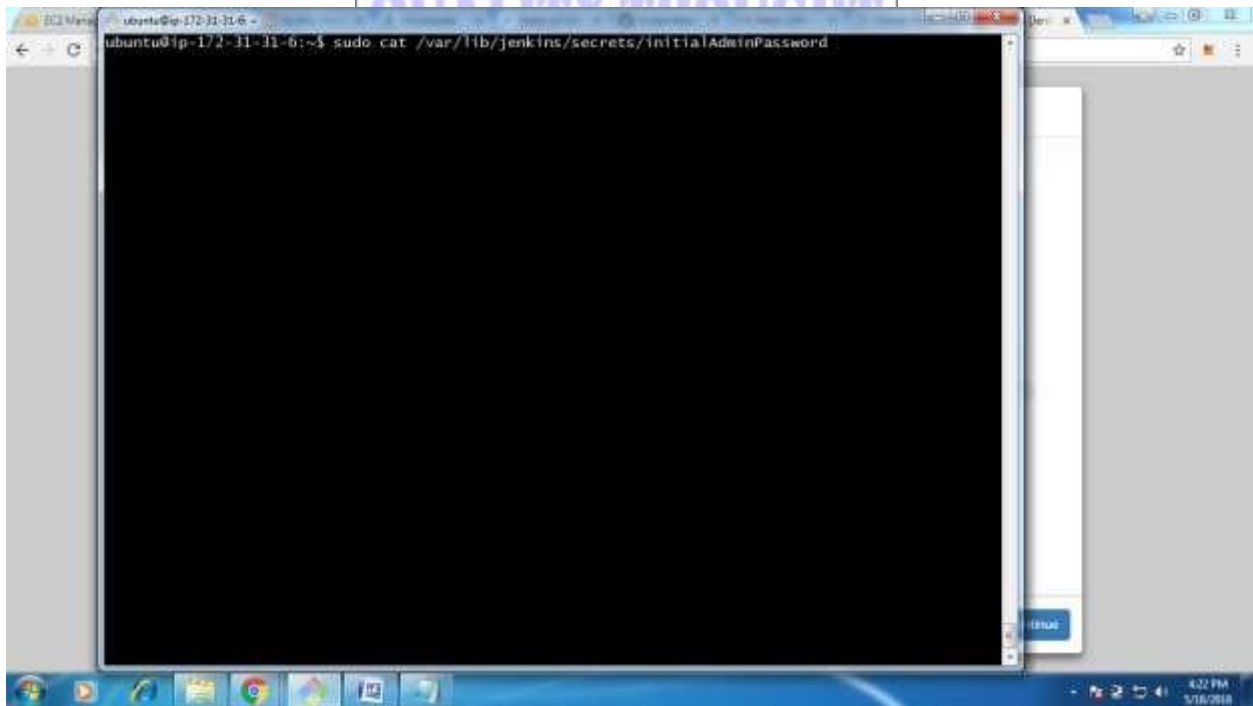
```
ubuntu@ip-172-31-31-6:~$ sudo service jenkins status
Correct java version found
Jenkins Automation Server is running with the pid 5070
ubuntu@ip-172-31-31-6:~$
```

Go to any browser give your `ip:8080`



Got to terminal run below command for passwd

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

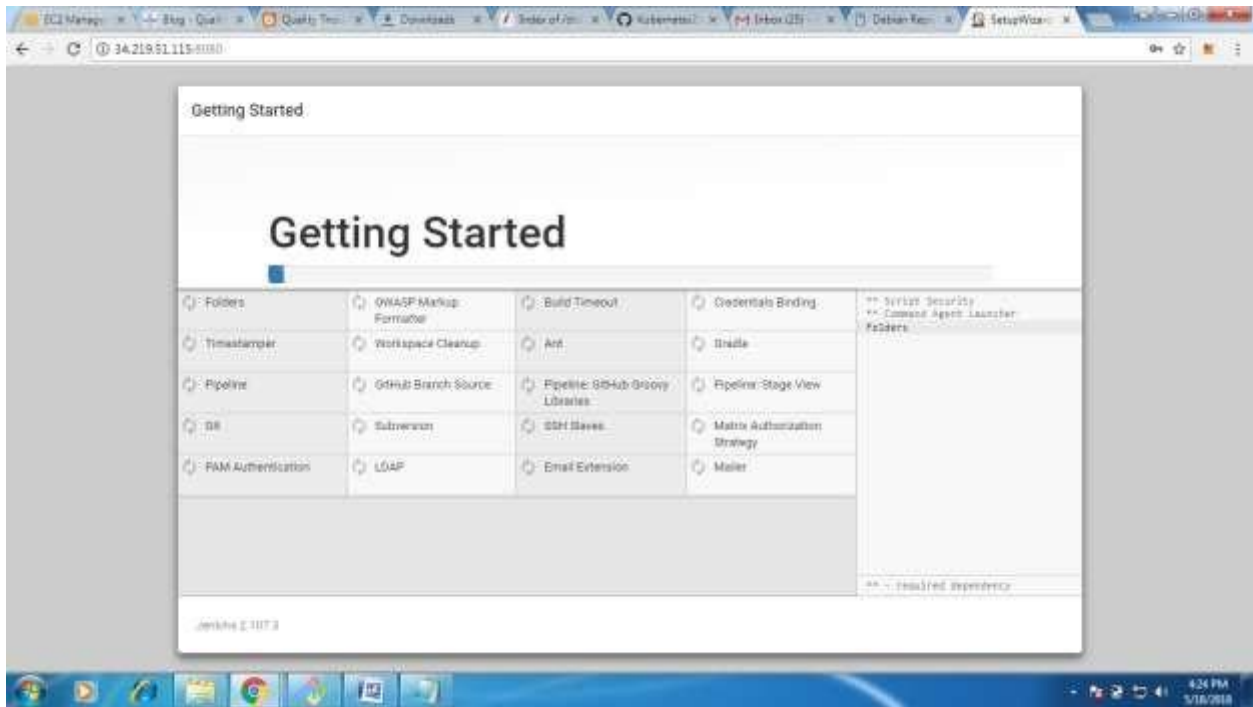


Copy and paste in your browser and click continue



Install suggested plugins

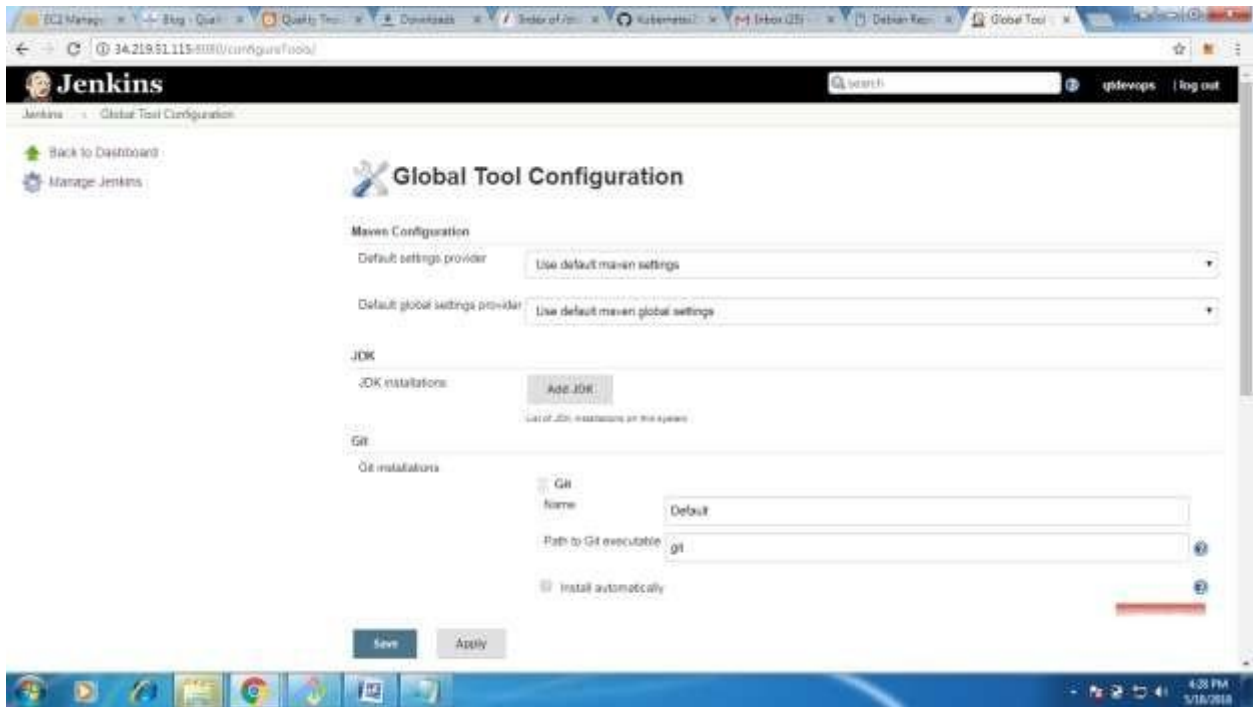




Step: Create user Fill all details whatever it asks After you will see like

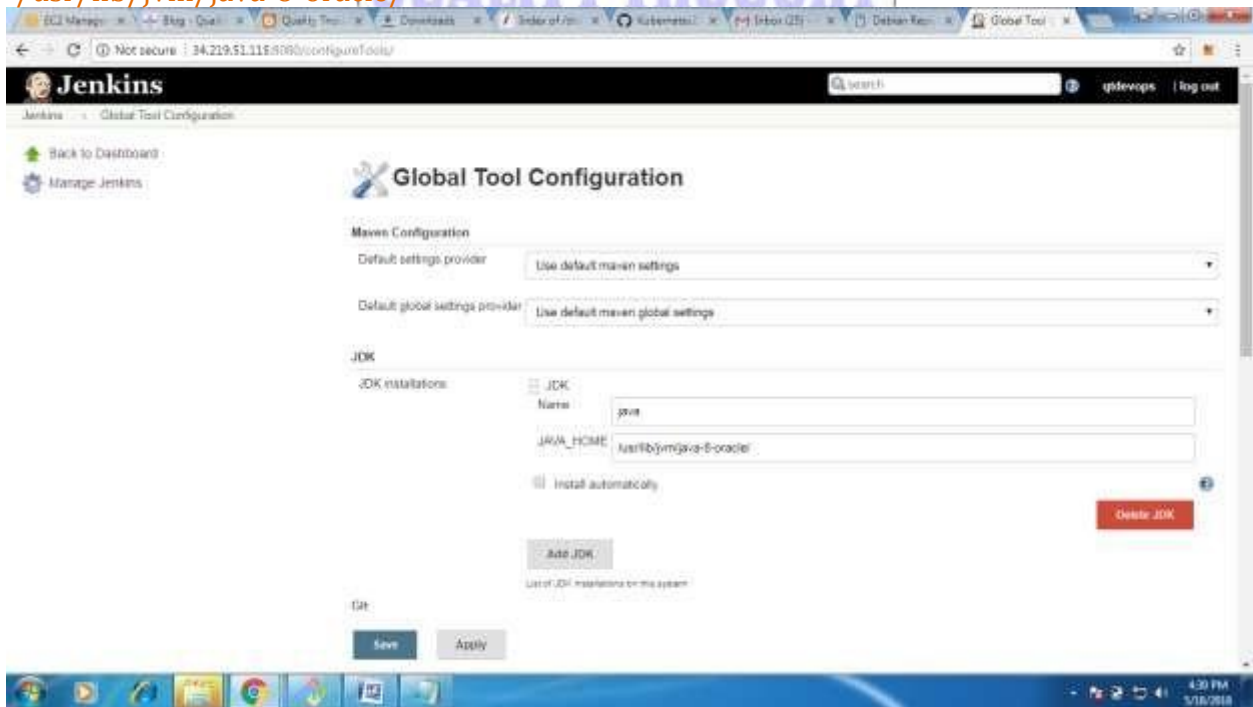


Step: Click on Mange Jenkins go to Global Tool Configuration



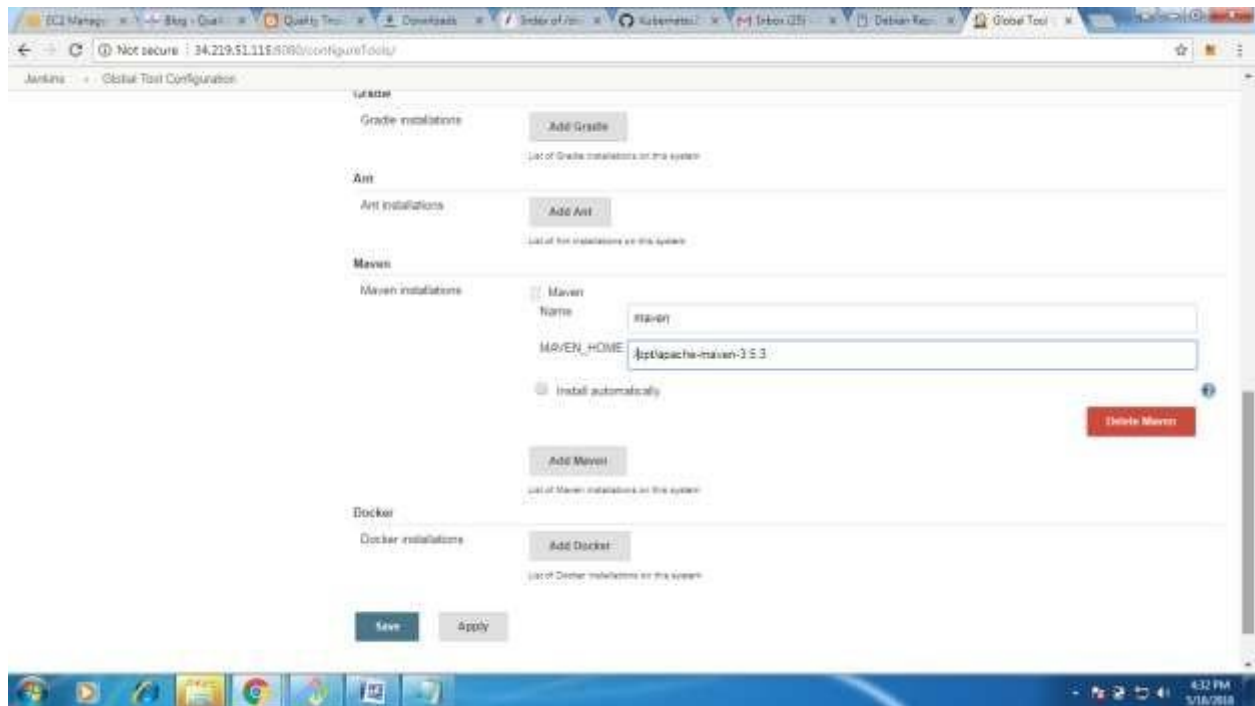
Step: Set JAVA_HOME Path on Jenkins Server

[/usr/lib/jvm/java-8-oracle/](#)



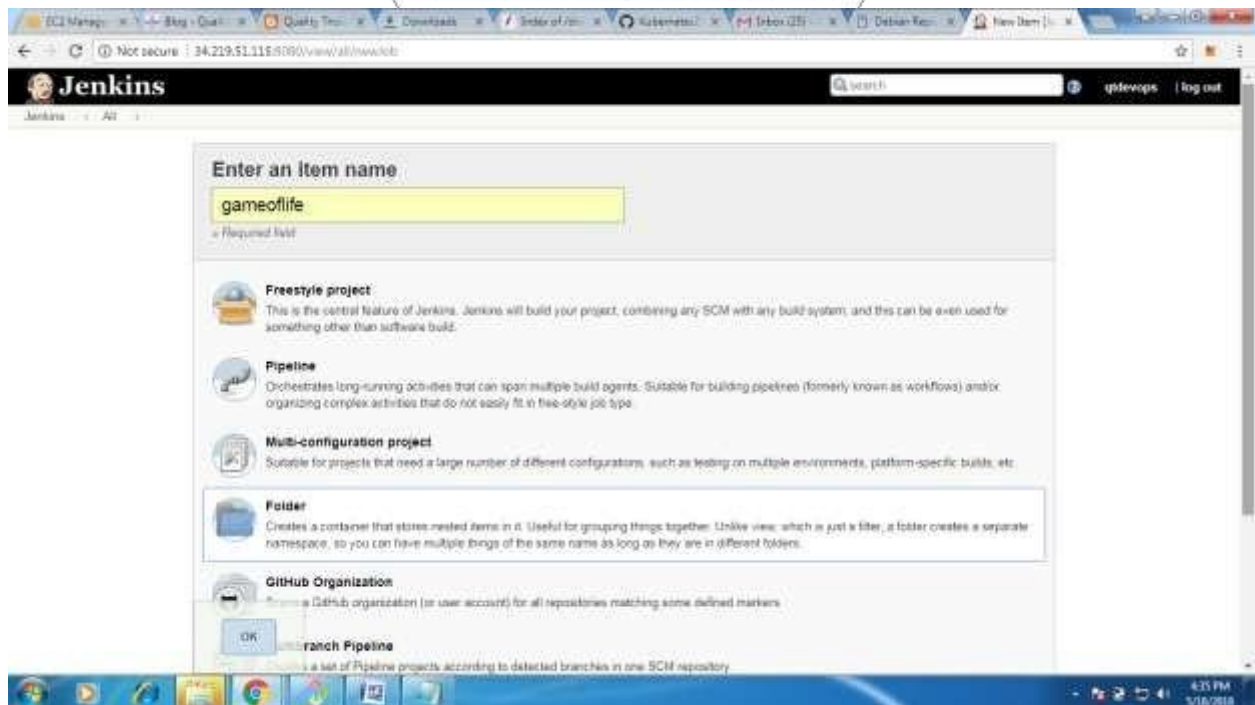
step: Set Maven path variable on Jenkins server

copy this to MAVEN_HOME => /opt/apache-maven-3.5.3



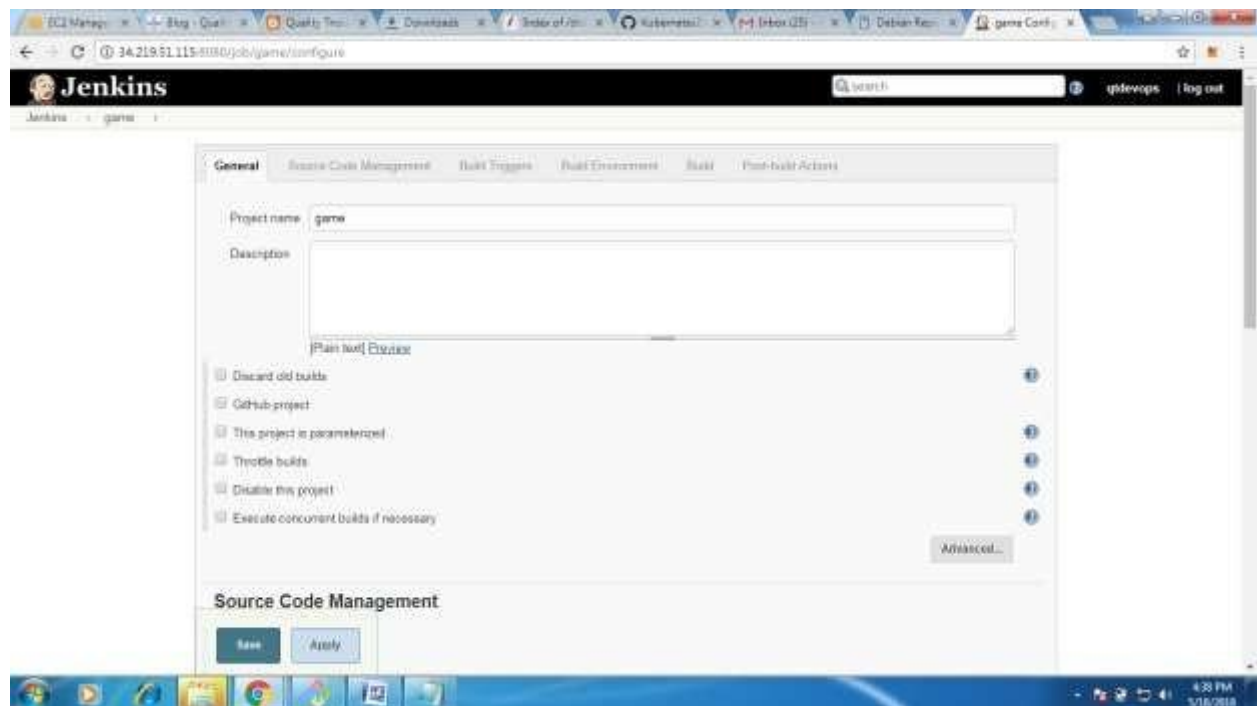
Then click apply and save

Create One Freestyle project

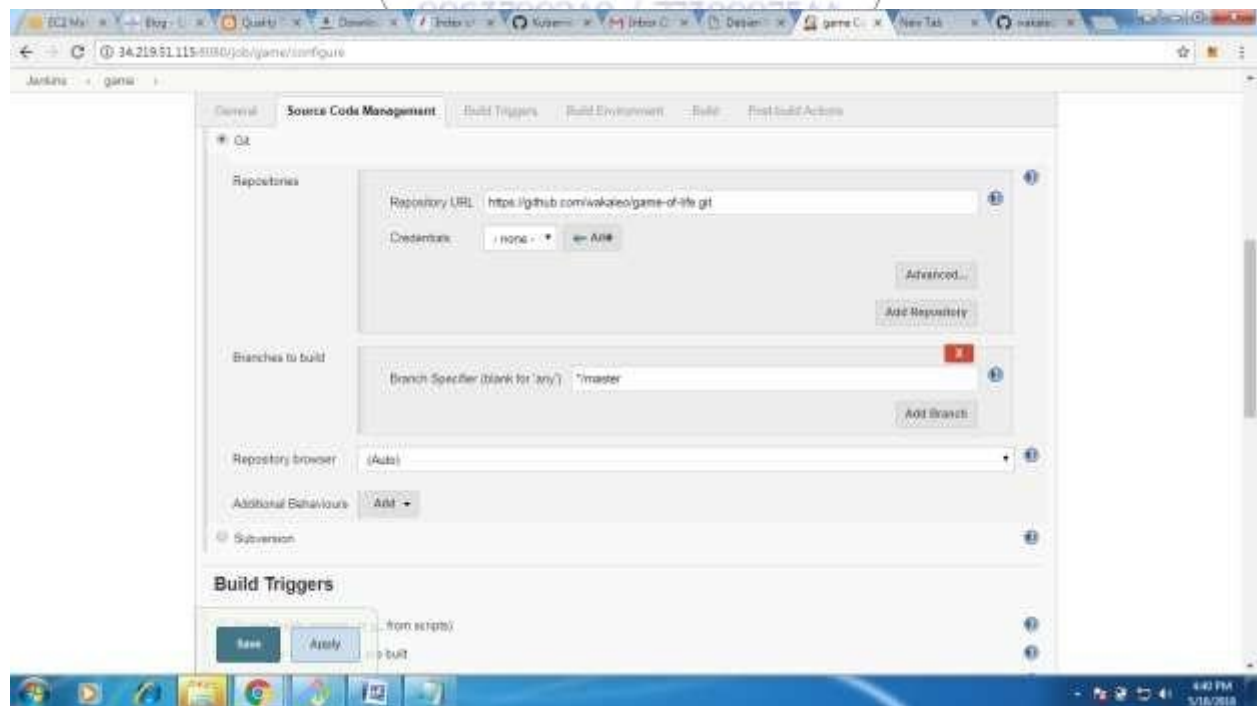


Click Ok.

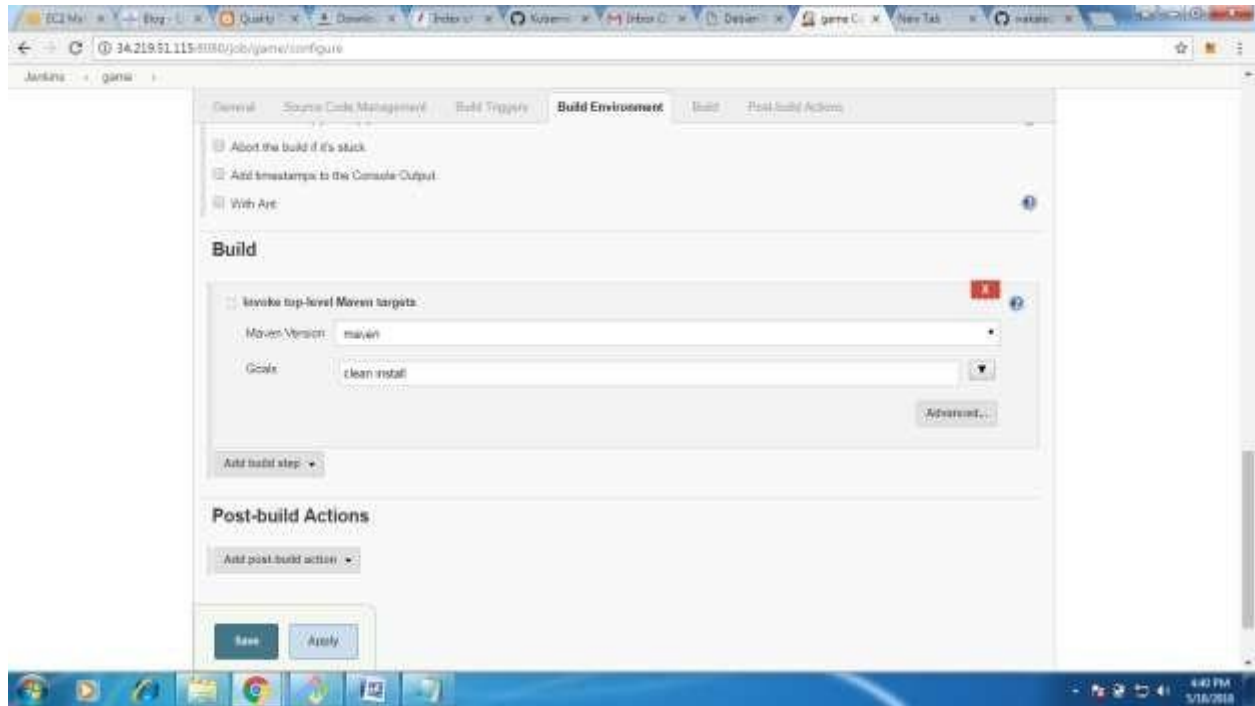
The page will open like bellow screen shot:



Scroll down and in the Source code management section enter your source code path. Here, we took git as our source code path



In the below Build section select "Invoke toplevel maven" in the option and enter Maven goals



Click Build Now option and goto console output check whether the build is success or fail



you can also check about the build output by seeing the color of the status of the last build on the dashboard.

The screenshot shows the Jenkins dashboard interface. At the top, there's a navigation bar with the Jenkins logo, a search bar, and user options like 'gdevops' and 'log out'. Below this, there's a sidebar with navigation links: 'New Item', 'People', 'Build History', 'Manage Jenkins', 'My Views', 'Credentials', and 'New View'. The main content area displays a table of build history for a job named 'JWDH'. The table has columns for 'S' (status), 'W' (workspace), 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. The first row shows a successful build with a green status icon, a yellow workspace icon, and a duration of '1 min 5 sec'. The second row shows a failed build with a red status icon and a duration of 'N/A'. Below the table, there are links for 'Learn more', 'RSS for all', 'RSS for failures', and 'RSS for our latest builds'. At the bottom of the dashboard, there are sections for 'Build Queue' (showing 'No builds in the queue') and 'Build Executor Status' (showing '1 idle' and '2 idle'). The footer of the dashboard indicates 'Page generated: May 16, 2018 11:13:55 AM UTC' and 'JENKINS-2.100.3'. The Windows taskbar is visible at the bottom of the browser window, showing the time as 4:44 PM on 5/16/2018.

S	W	Name	Last Success	Last Failure	Last Duration
		JWDH	2 min 11 sec - 85	N/A	1 min 5 sec
		gdevops	N/A	N/A	N/A

QUALITY THOUGHT
The Leader in Software Training
9963799240 / 7730997544
Ameerpet / Kondapur
Hyderabad