

# JENKINS Installation Steps on UBUNTU:14.04

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.

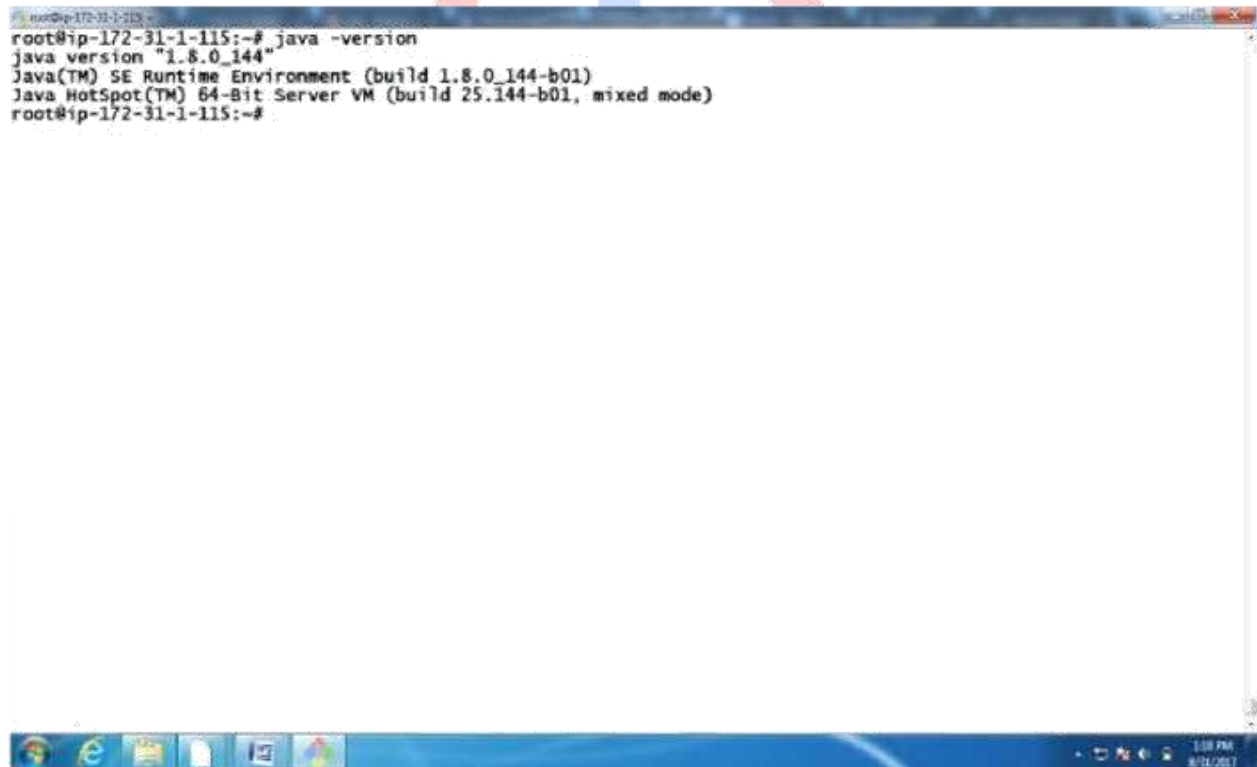
2. After that, update system package cache and install Oracle java 8

```
sudo apt-get update
```

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

step2: check java version

```
java -version
```



```
root@ip-172-31-1-115:~# java -version
java version "1.8.0_144"
Java(TM) SE Runtime Environment (build 1.8.0_144-b01)
Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)
root@ip-172-31-1-115:~#
```

**PH:** 9963486280, 9963799240

**Location:** Ameerpet / Kondapur

**Email Id:** [info@qualitythought.in](mailto:info@qualitythought.in)

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**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:

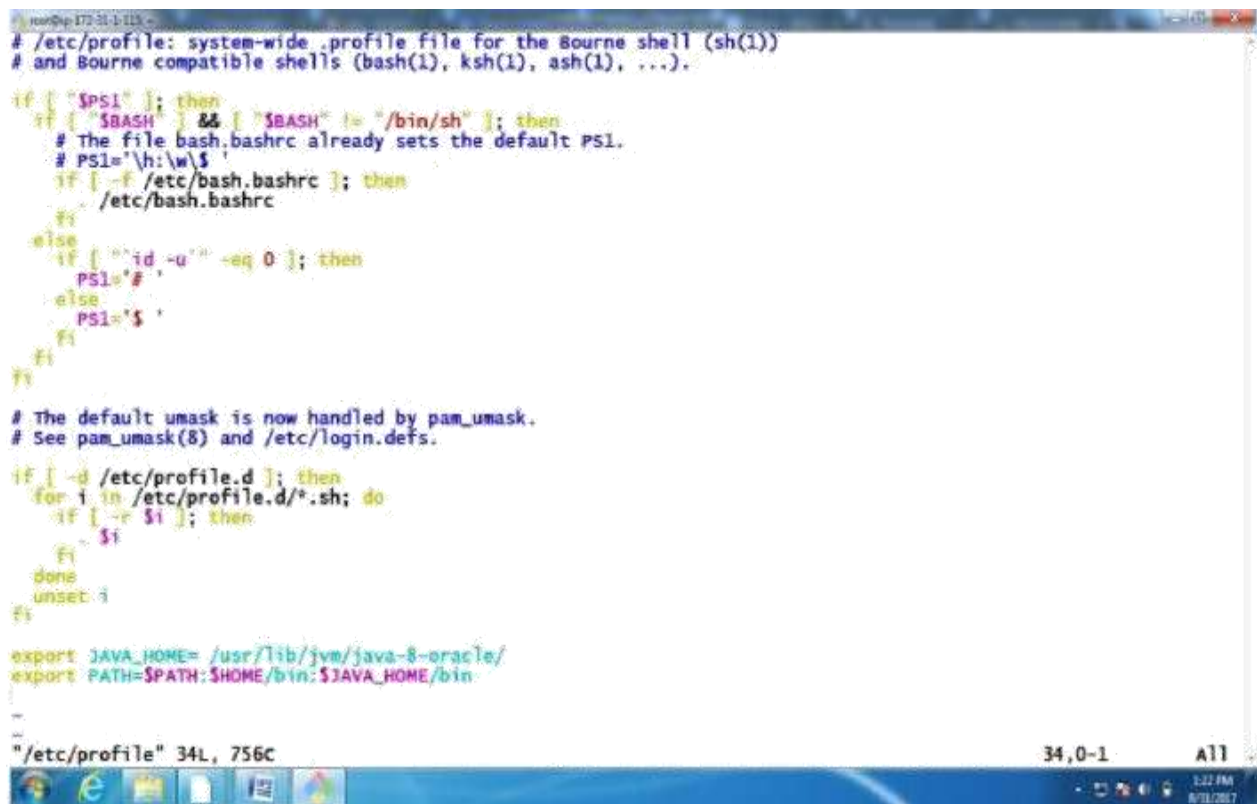
open /etc/profile

vi /etc/profile

add bellow steps end of file

export JAVA\_HOME=/usr/lib/jvm/java-8-oracle/

export PATH=\$PATH:\$HOME/bin:\$JAVA\_HOME/bin



```
# /etc/profile: system-wide .profile file for the Bourne shell (sh(1))
# and Bourne compatible shells (bash(1), ksh(1), ash(1), ...).

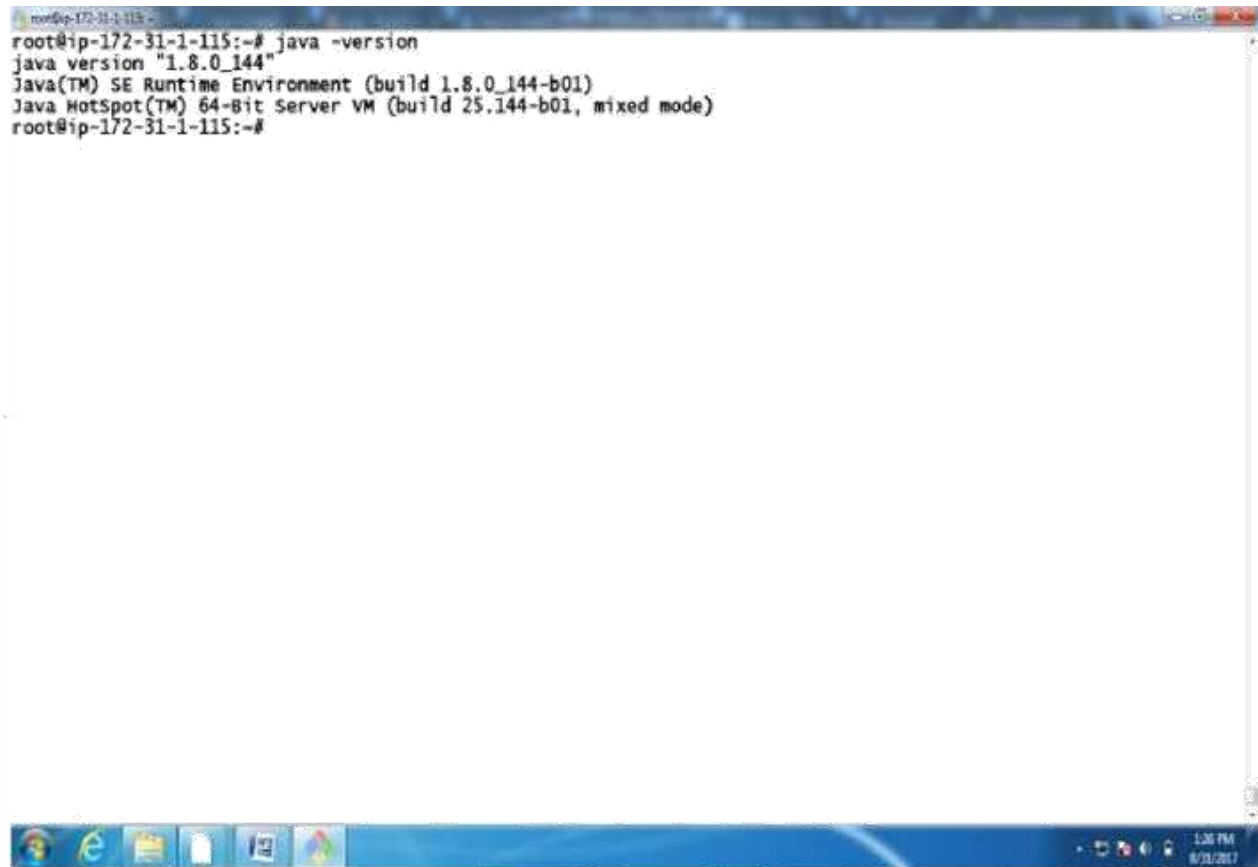
if [ "$PS1" ]; then
  if [ "$BASH" ] && [ "$BASH" != "/bin/sh" ]; then
    # The file bash.bashrc already sets the default PS1.
    # PS1='h:\w\$ '
    if [ -f /etc/bash.bashrc ]; then
      . /etc/bash.bashrc
    fi
  else
    if [ "${id -u}" -eq 0 ]; then
      PS1='# '
    else
      PS1='$ '
    fi
  fi
fi

# The default umask is now handled by pam_umask.
# See pam_umask(8) and /etc/login.defs.

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

step4: check your path

A screenshot of a terminal window titled 'root@ip-172-31-1-115:~'. The terminal shows the command 'java -version' being executed. The output is: 'java version "1.8.0\_144"', 'Java(TM) SE Runtime Environment (build 1.8.0\_144-b01)', and 'Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)'. The terminal window has a standard Linux desktop environment background with a taskbar at the bottom showing icons for Firefox, LibreOffice, and other applications. The system clock in the bottom right corner shows '1:30 PM' and '8/11/2017'.

```
root@ip-172-31-1-115:~# java -version
java version "1.8.0_144"
Java(TM) SE Runtime Environment (build 1.8.0_144-b01)
Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)
root@ip-172-31-1-115:~#
```

Step5: Install maven

1. Download Apache Maven

Go to /opt directory

cd /opt

Download maven tar file

```
wget http://www-eu.apache.org/dist/maven/maven-3/3.5.2/binaries/apache-
maven-3.5.2-bin.tar.gz
```

```
root@ip-172-31-17-244: /opt
java version "1.8.0_161"
Java(TM) SE Runtime Environment (build 1.8.0_161-b12)
Java HotSpot(TM) 64-Bit Server VM (build 25.161-b12, mixed mode)
root@ip-172-31-17-244:~# cd /opt
root@ip-172-31-17-244:/opt# wget http://www-eu.apache.org/dist/maven/maven-3/3.5.2/binaries/apache-maven-3.5.2-bin.tar.gz
--2018-02-15 12:32:13-- http://www-eu.apache.org/dist/maven/maven-3/3.5.2/binaries/apache-maven-3.5.2-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: 8738691 (8.3M) [application/x-gzip]
Saving to: 'apache-maven-3.5.2-bin.tar.gz'

100%[=====] 8,738,691 4.23MB/s in 2.0s

2018-02-15 12:32:16 (4.23 MB/s) - 'apache-maven-3.5.2-bin.tar.gz' saved [8738691/8738691]

root@ip-172-31-17-244:/opt# ls
apache-maven-3.5.2-bin.tar.gz
root@ip-172-31-17-244:/opt#
```

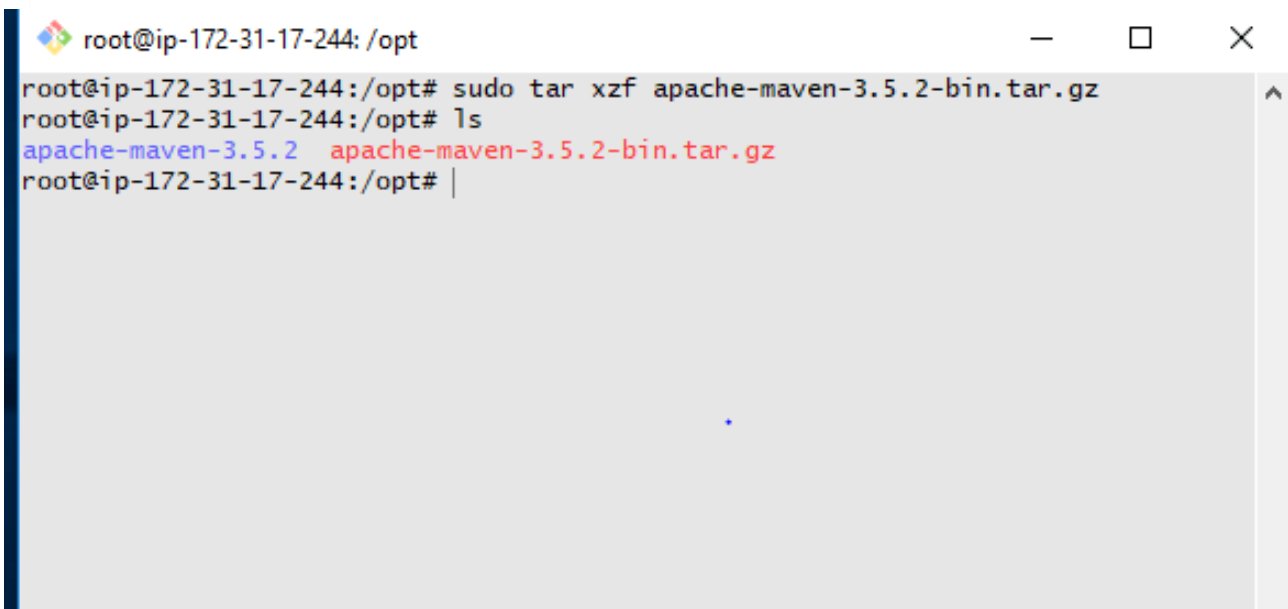
**Extract Apache Maven:**

**Using below command:**

```
sudo tar xzf apache-maven-3.5.2-bin.tar.gz
```

**After run below command:**

```
sudo ln -s /opt/apache-maven-3.5.2/bin/mvn /usr/bin/mvn
```

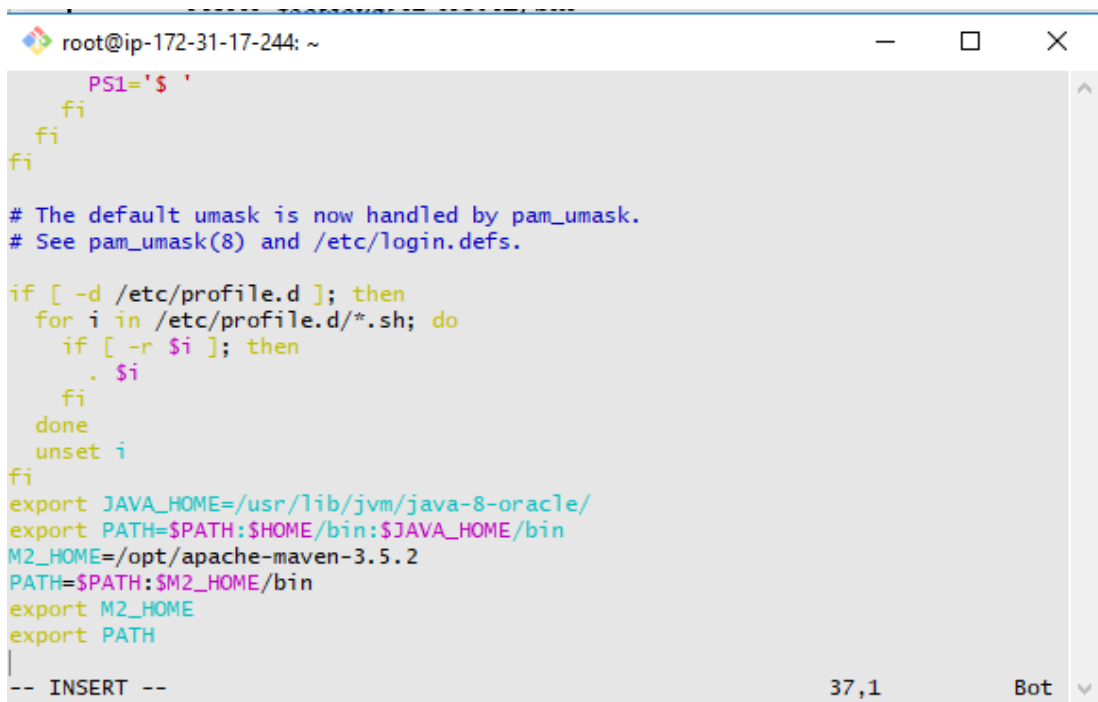


```
root@ip-172-31-17-244: /opt
root@ip-172-31-17-244:/opt# sudo tar xzf apache-maven-3.5.2-bin.tar.gz
root@ip-172-31-17-244:/opt# ls
apache-maven-3.5.2  apache-maven-3.5.2-bin.tar.gz
root@ip-172-31-17-244:/opt#
```

## Setup Environment Variables for maven

Go to /etc/profile add bellow steps

```
vi /etc/profile
M2_HOME=/opt/apache-maven-3.5.2
PATH=$PATH:$M2_HOME/bin
export M2_HOME
export PATH
```



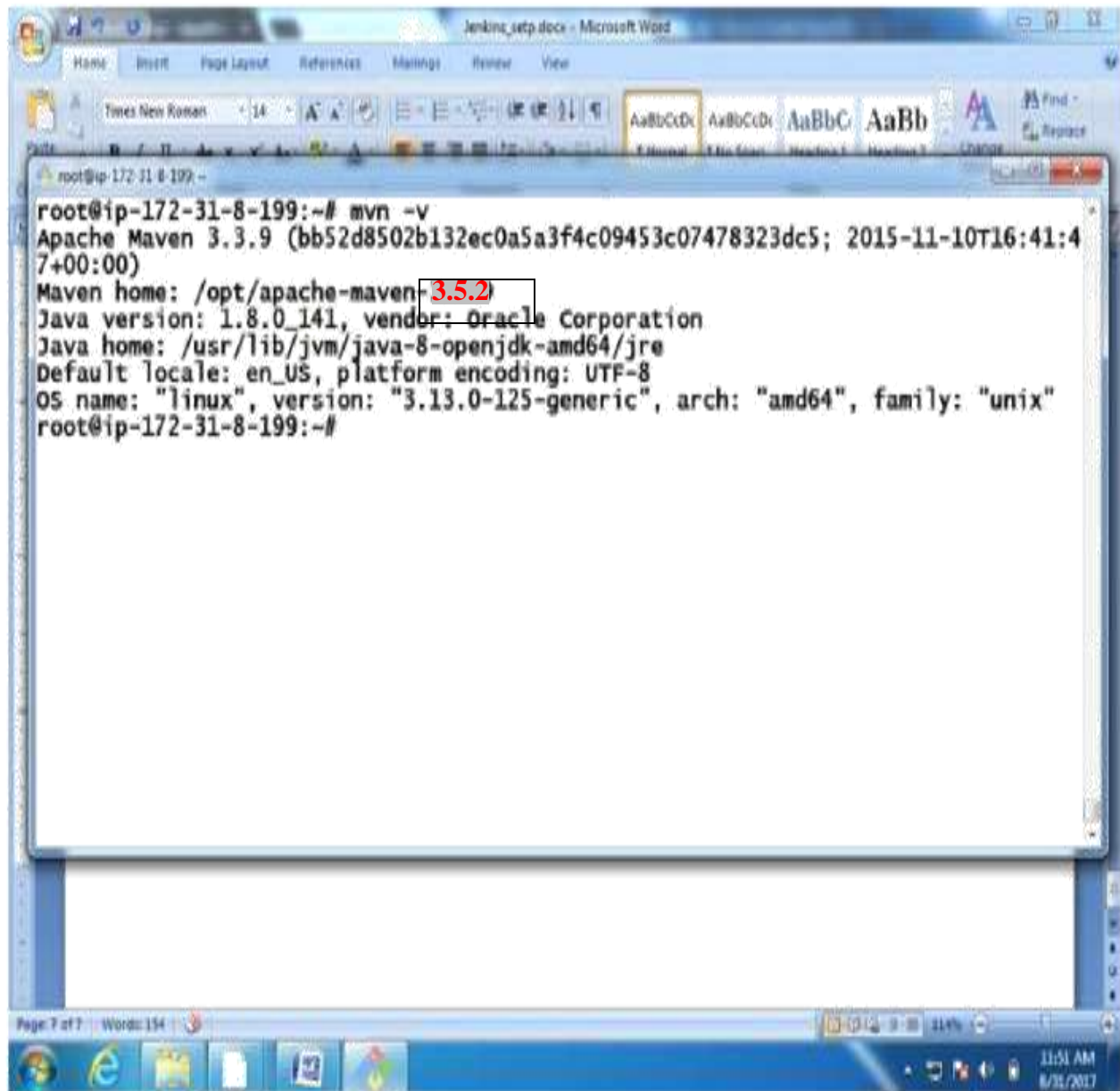
```
root@ip-172-31-17-244: ~
PS1='$ '
fi
fi
fi

# The default umask is now handled by pam_umask.
# See pam_umask(8) and /etc/login.defs.

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:$HOME/bin:$JAVA_HOME/bin
M2_HOME=/opt/apache-maven-3.5.2
PATH=$PATH:$M2_HOME/bin
export M2_HOME
export PATH

-- INSERT --
```

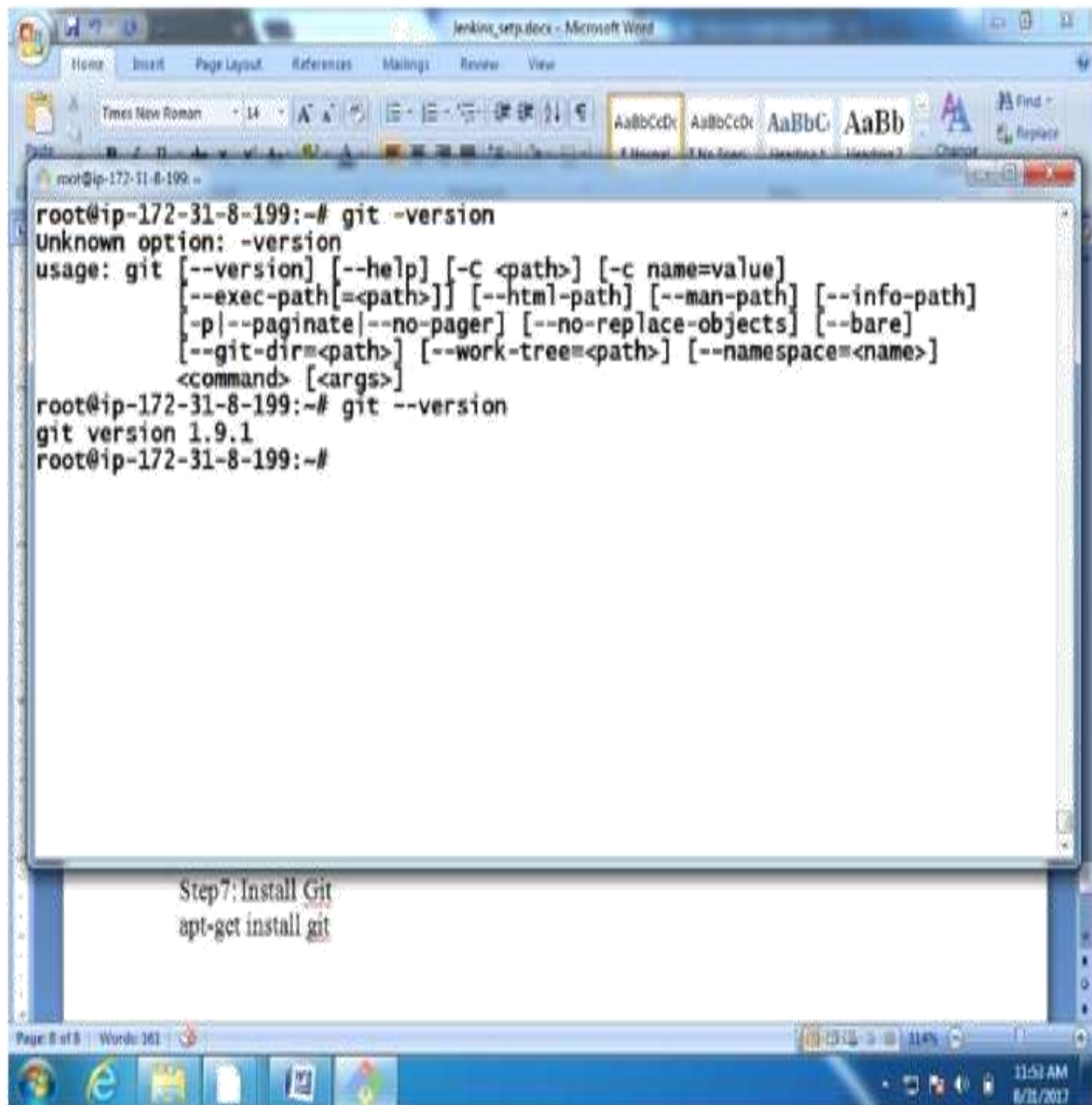
step6: Check maven version

A screenshot of a terminal window overlaid on a Microsoft Word document titled 'Jenkins\_setup.docx'. The terminal shows the output of the command 'mvn -v' on a system with IP 172.31.8.199. The output lists Apache Maven 3.3.9, Java version 1.8.0\_141, and other system details. The version number '3.5.2' is highlighted in a red box next to the Maven home path.

```
root@ip-172-31-8-199:~# mvn -v
Apache Maven 3.3.9 (bb52d8502b132ec0a5a3f4c09453c07478323dc5; 2015-11-10T16:41:47+00:00)
Maven home: /opt/apache-maven-3.5.2
Java version: 1.8.0_141, vendor: Oracle Corporation
Java home: /usr/lib/jvm/java-8-openjdk-amd64/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "3.13.0-125-generic", arch: "amd64", family: "unix"
root@ip-172-31-8-199:~#
```

Step7: Install Git  
apt-get install git





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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 http://pkg.jenkins.io/debian-stable binary/  
>/etc/apt/sources.list.d/jenkins.list'



```
root@ip-172-31-8-199:~# git --version
Unknown option: --version
usage: git [--version] [--help] [-C <path>] [-c name=value]
       [--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
       [-p|--paginate|--no-pager] [--no-replace-objects] [--bare]
       [--git-dir=<path>] [--work-tree=<path>] [--namespace=<name>]
       <command> [<args>]
root@ip-172-31-8-199:~# git --version
git version 1.9.1
root@ip-172-31-8-199:~# wget -q -O - https://pkg.jenkins.io/debian/jenkins-ci.org.key | sudo apt-key add -
OK
root@ip-172-31-8-199:~#
```

What does this package do?

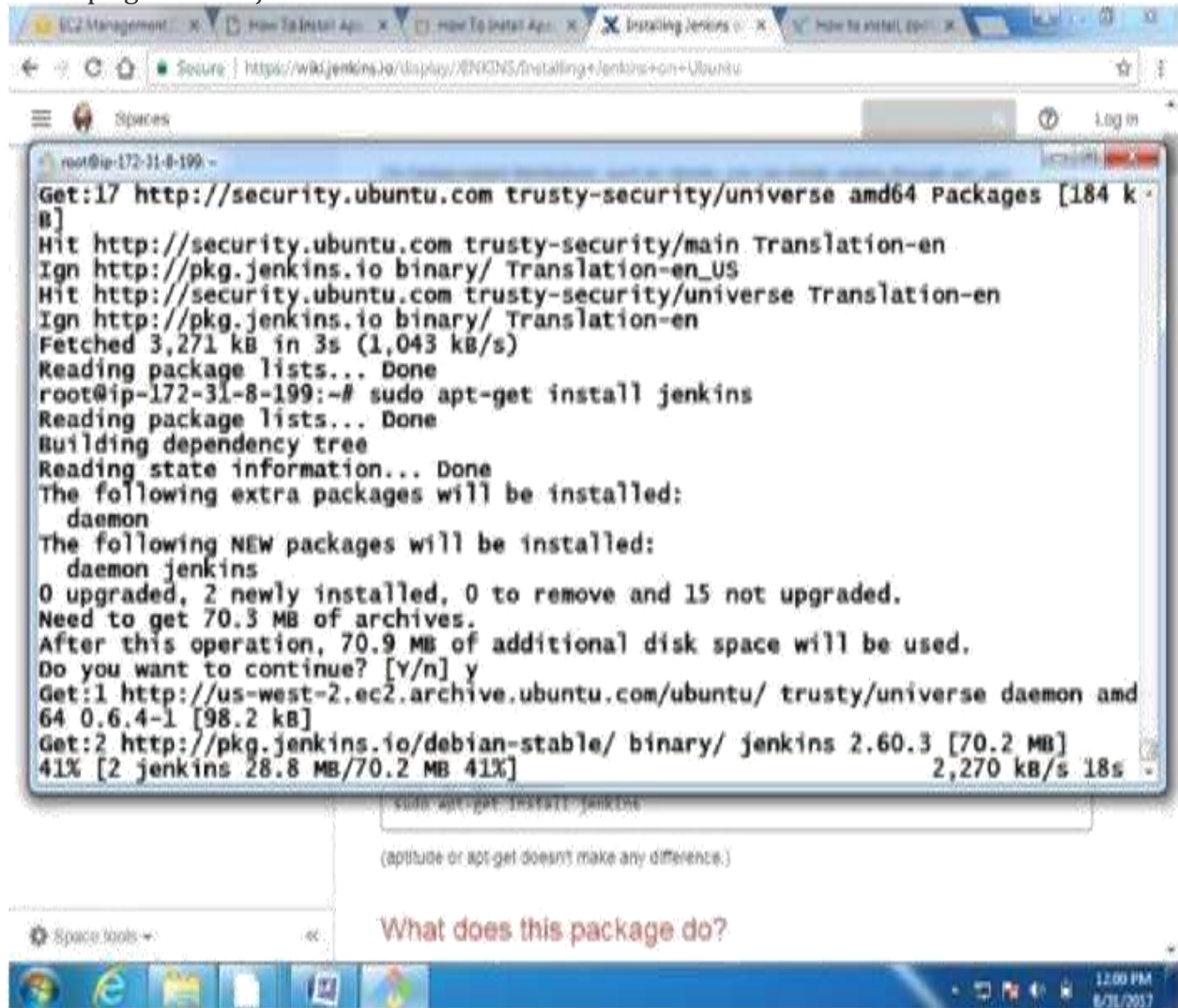


```
root@ip-172-31-8-199:~# sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable-binary/ > /etc/apt/sources.list.d/jenkins.list'
root@ip-172-31-8-199:~#
```

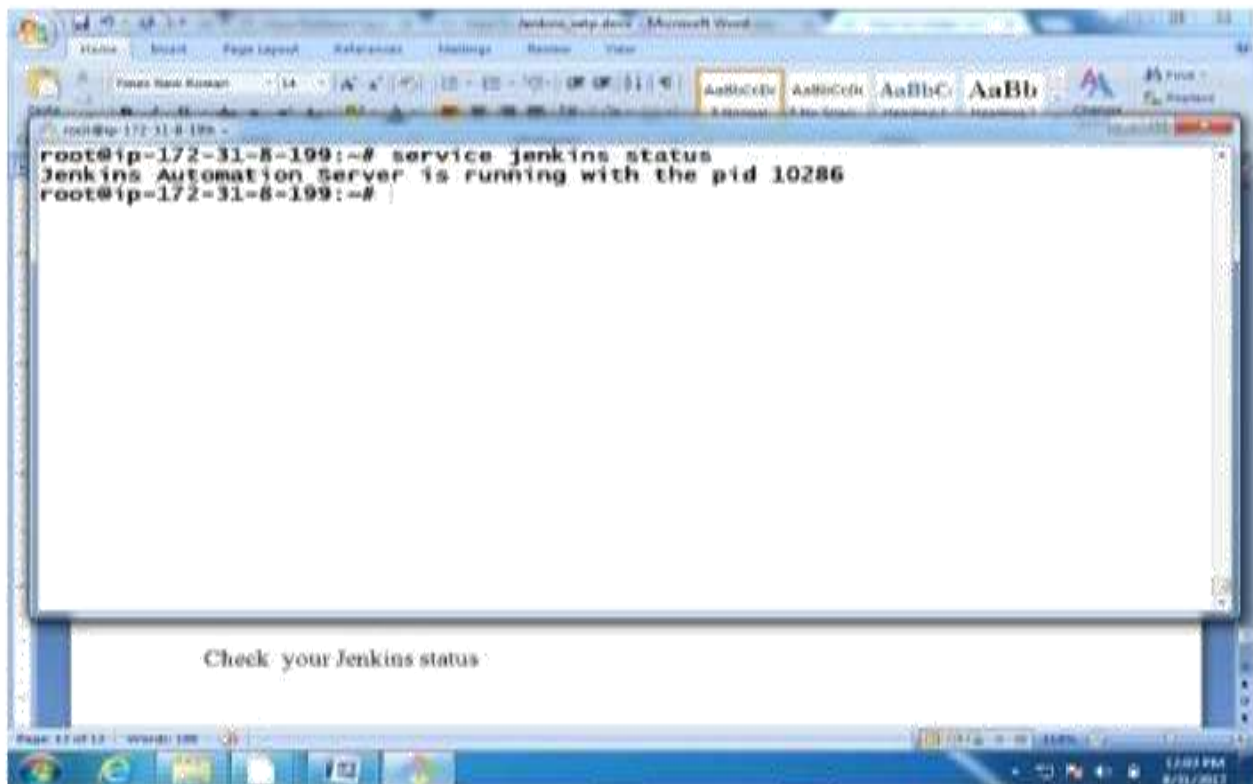
What does this package do?

sudo apt-get update

sudo apt-get install jenkins



Check your Jenkins status

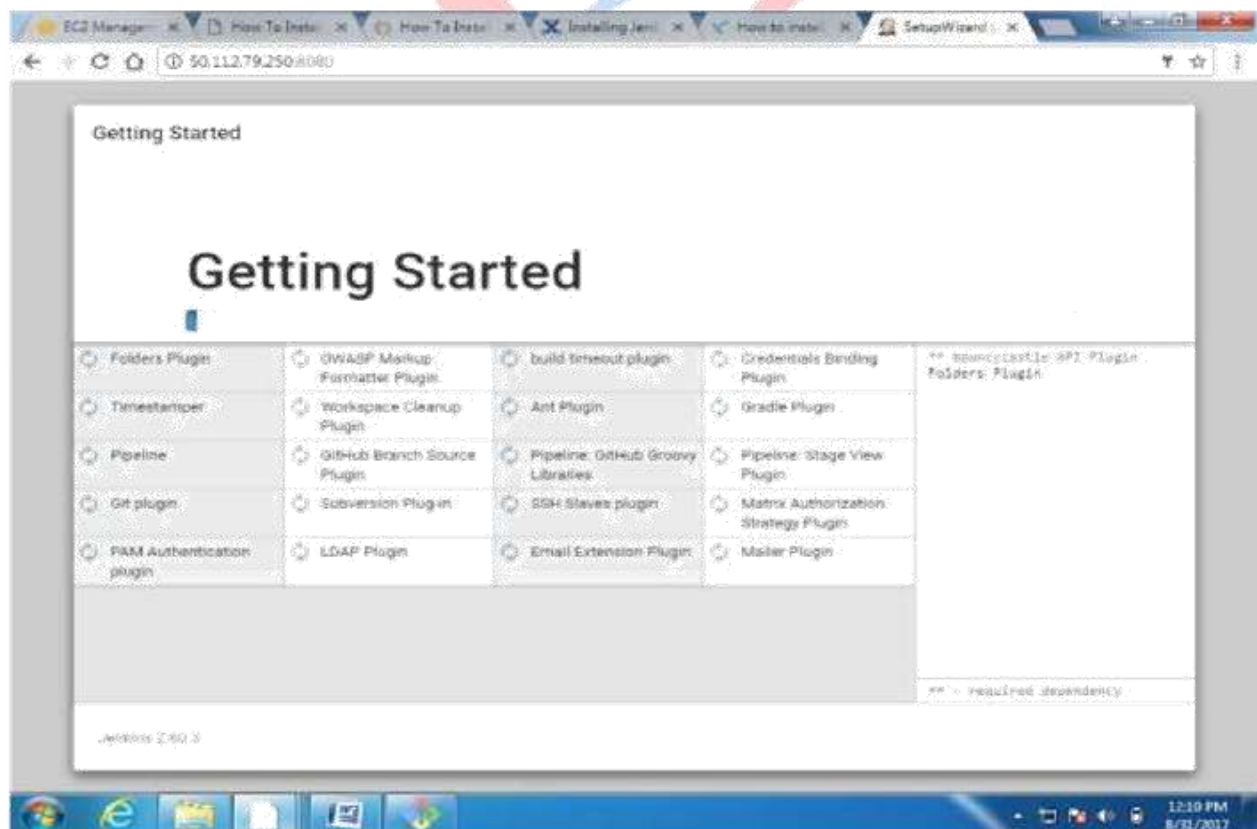
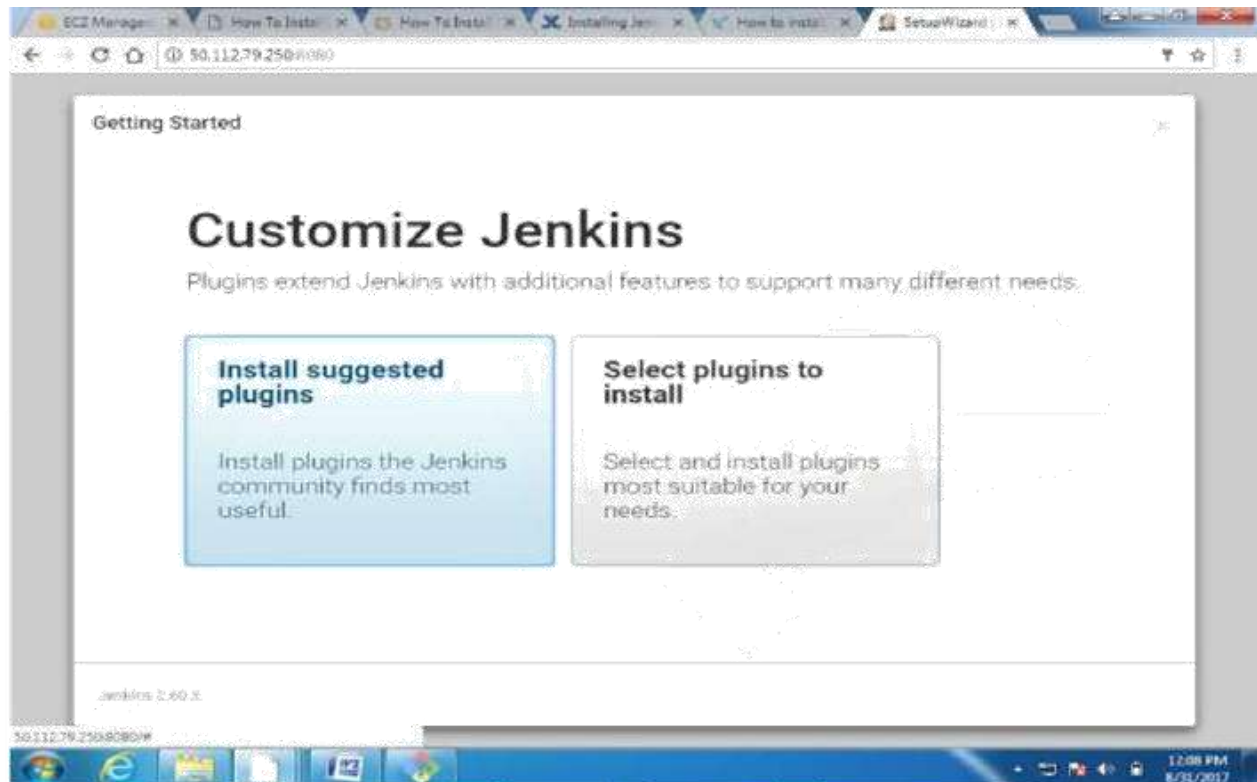


Go to any browser give your ip:8080





## Install suggested plugins



EC2 Manager x How To Inst... x How To Inst... x Installing Je... x How to insta... x Dashboard [x]

50.112.79.250:8080

Jenkins

qualitythought | log out

add description

New Item

People

Build History

Manage Jenkins

My Views

Credentials

## Welcome to Jenkins!

Please [create new jobs](#) to get started.

Build Queue

No builds in the queue.

Build Executor Status

- 1 Idle
- 2 Idle

Page generated: Aug 31, 2017 6:48:41 AM UTC BEST API Jenkins ver. 2.60.1

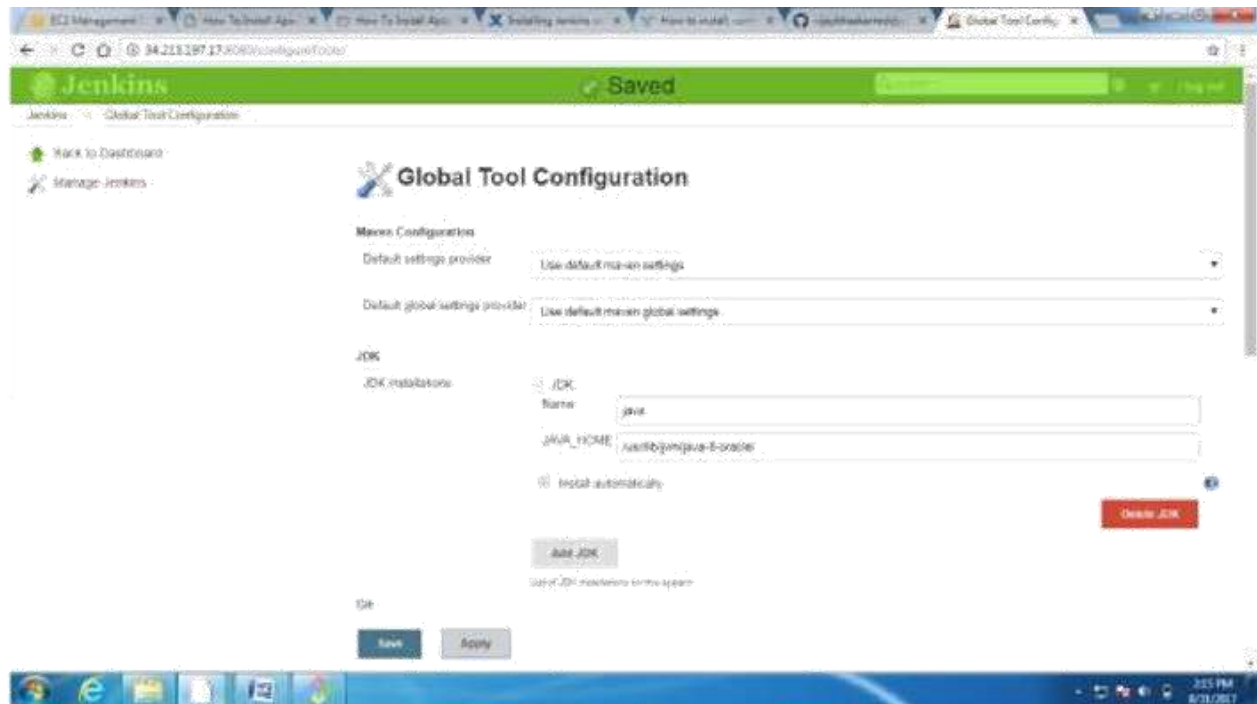
12:20 PM 8/31/2017

The screenshot shows the Jenkins web interface at the URL `80.112.79.250:8080/configureTools/`. The page title is "Global Tool Configuration".

- Maven Configuration:**
  - Default settings provider: **Use default maven settings**
  - Default global settings provider: **Use default maven global settings**
- JDK:**
  - JDK installations: **Add JDK** (button)
  - Subtext: List all JDK installations on this system
- Git:**
  - Git installations:
    - Name: **Default**
    - Path to Git executable: **git**
    - Install automatically: ☒

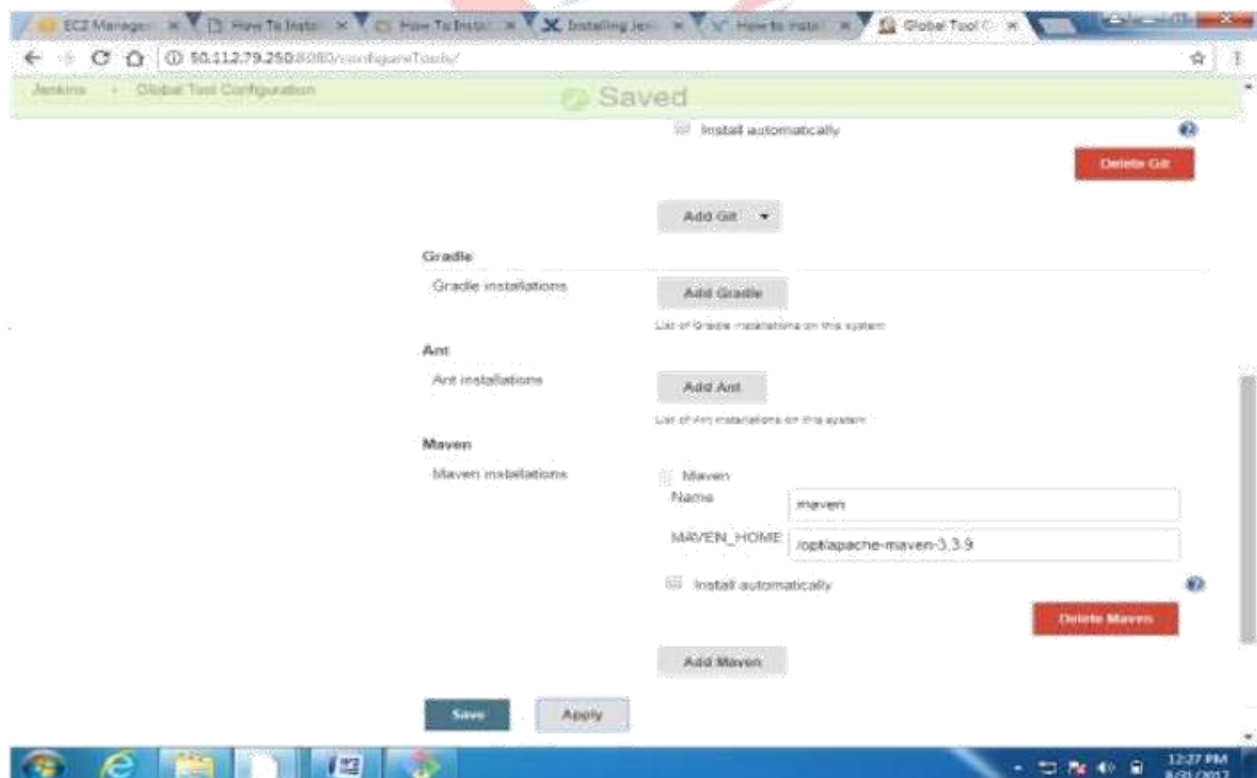
At the bottom of the configuration area are two buttons: **Save** and **Apply**.

Step: Set JAVA\_HOME Path on Jenkins Server



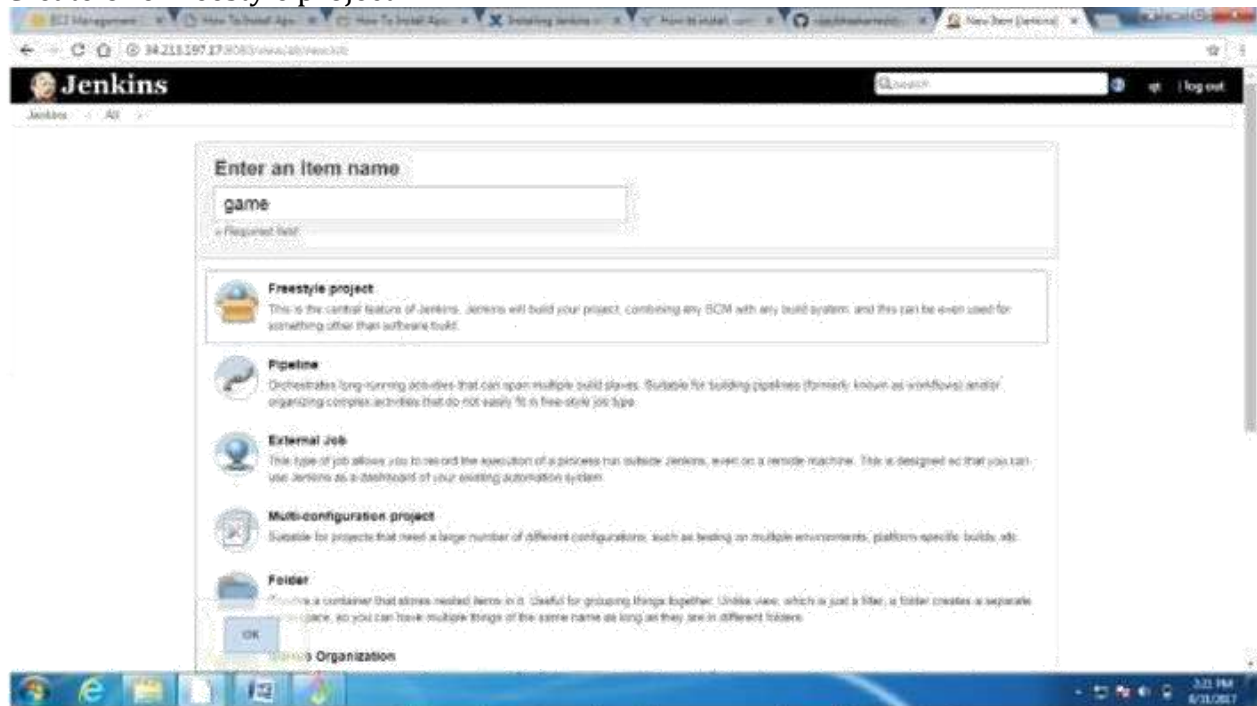
step: Set Maven path variable on Jenkins server

copy this to MAVEN\_HOME => /opt/apache-maven-3.5.2



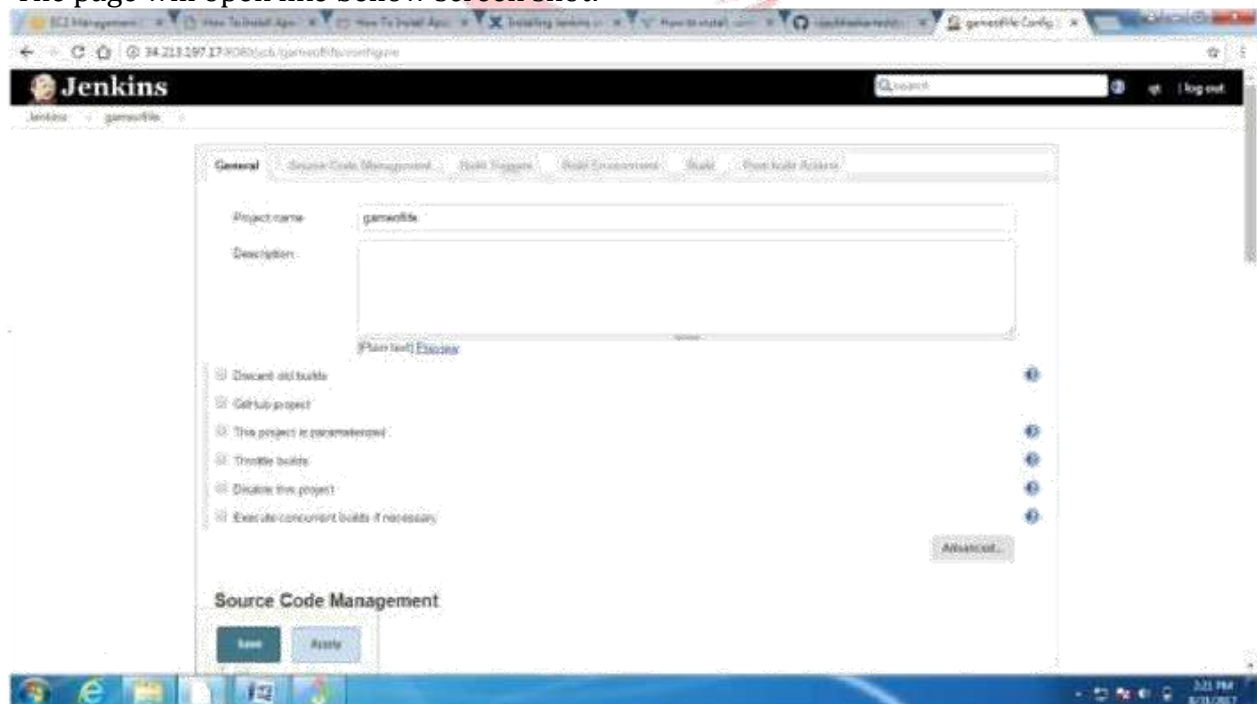
Then click apply and save

## Create One Freestyle project



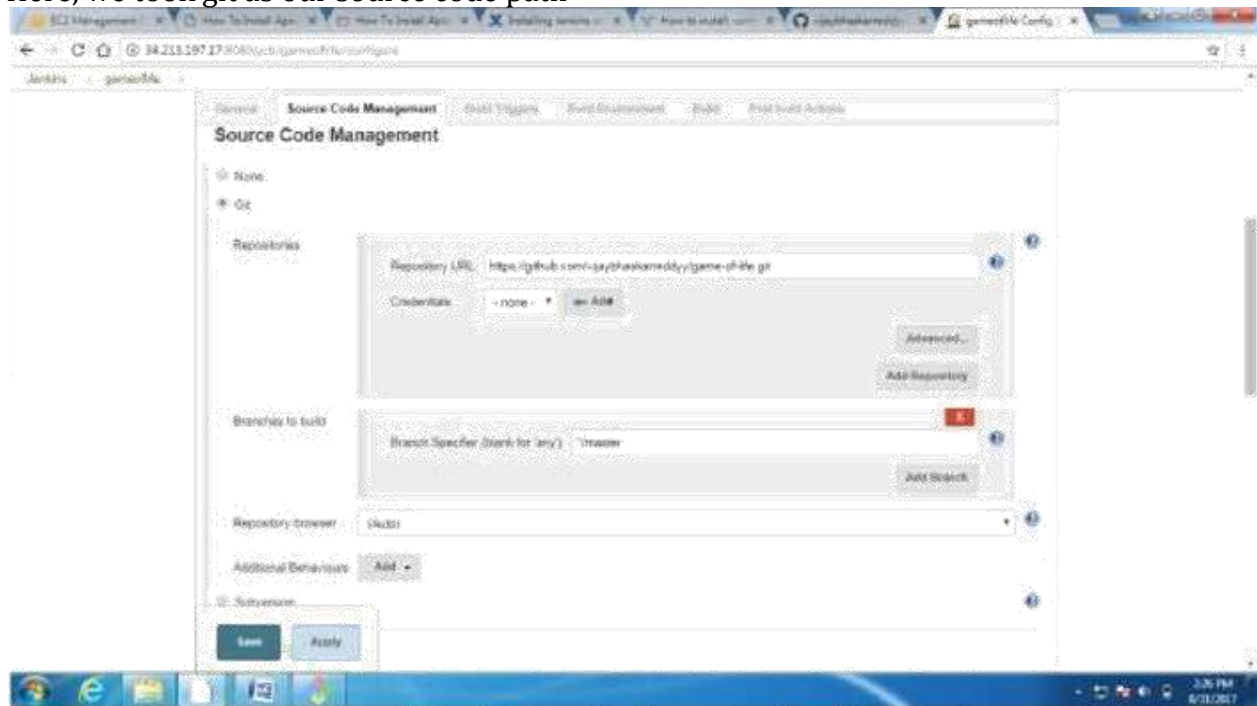
Click Ok.

The page will open like bellow screen shot:

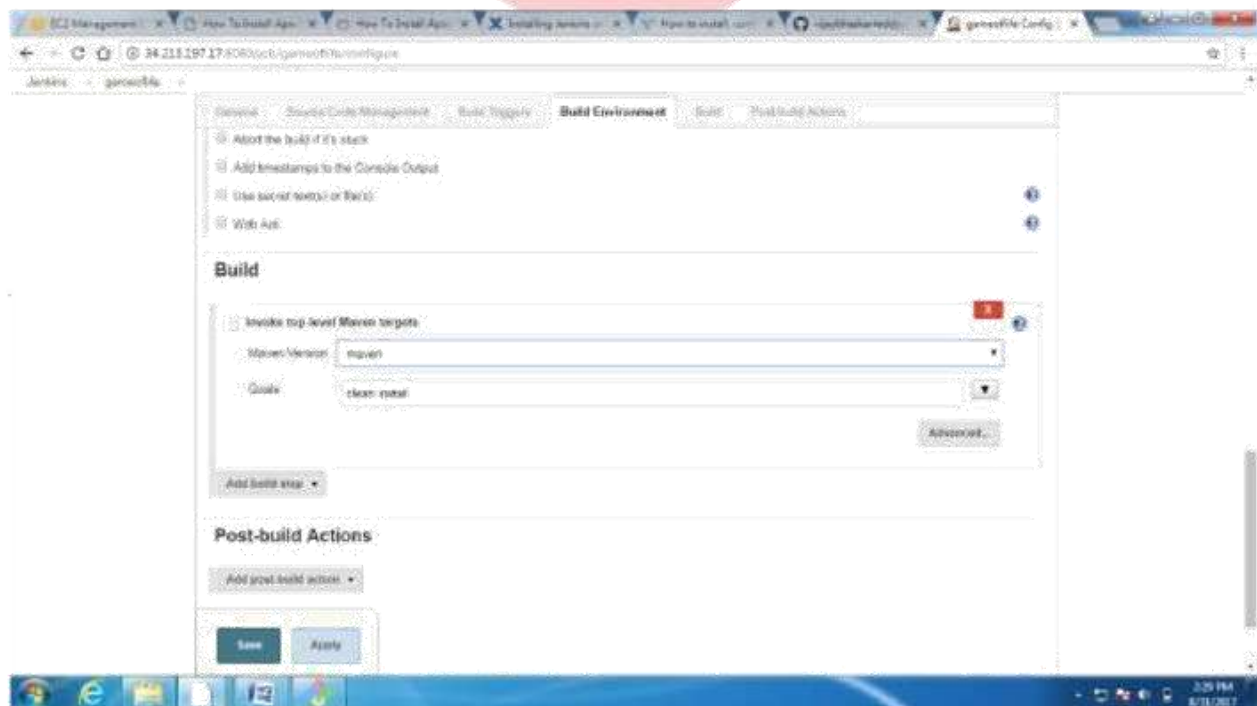




Scroll down and in the Source code management section enter your source code path.  
Here, we took git as our source code path



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

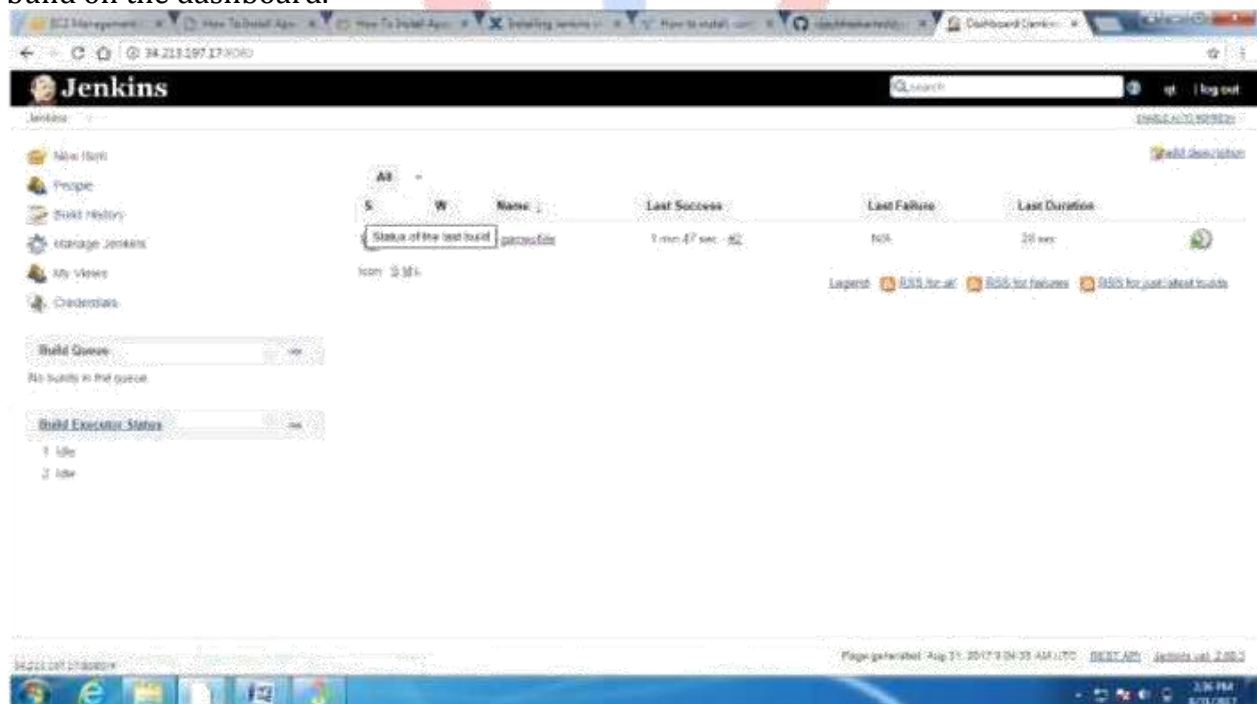


click apply and save

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.



Blue color represents success of the build and Red color represents failure of the build