**Configuring JDK and Maven**

1. Login Jenkins
2. Click **Manage Jenkins** from left panel

***Configuring and Installing JDK automatically***

1. Click **Global Tools Configuration**
2. In the JDK section, Click on **Add JDK** button
3. Enter **Name** as JDK 9
4. Keep **Version** selected as Java SE Development Kit 9.0.4
5. Select **I agree to the Java SE Development Kit License Agreement** checkbox
6. Click on link [Please enter your username/password](http://35.238.83.67:8080/descriptorByName/hudson.tools.JDKInstaller/enterCredential) for Oracle account in the warning shown.
7. **Enter Your Oracle Account** page appears in separate tab.

Note: If you do not have any oracle account, please create one.

1. Enter **Username** as your Oracle Account Username
2. Enter **Password** as your Oracle Account Password
3. Save the Credentials
4. Credentials is saved.
5. Click **close** and the tab will close.
6. Open the Jenkins Main Tab.
7. Click **Add Installer**
8. Select **Open JDK installer**
9. select Open JDK Package as java-1.8.0-openjdk
10. Click **Save** on Global Tool Configuration page.
11. Open the **Global Tools Configuration** page again.
12. Observe that the warning for Oracle account is now gone.

***Configuring JDK manually***

1. Click on **Add JDK** button
2. Enter **Name** as JDK 8
3. Unselect the checkbox **Install automatically**
4. JAVA\_HOME field appears above it
5. Enter **JAVA\_HOME** as /usr/lib/jvm/java-8-openjdk-amd64

Note: This is path of Java 8 installed before installing Jenkins in Ubuntu server in previous labs.

1. Click **Save**

***Configuring and Installing Maven automatically***

1. Open the **Global Tools Configuration** page again.
2. In the Maven section, Click on **Add Maven** button
3. Enter **Name** as maven 3.5.4
4. Under Install from Apache, Select **Version** as 3.5.4
5. Click on **Add Maven** again
6. Enter **Name** as maven 3.6.1
7. Under Install from Apache, Keep **Version** as 3.6.1
8. Click **Save**

**Test Job for using different JDK versions**

1. Navigate to Jenkins Home Page
2. Click **New Item** link on left panel
3. **Enter an Item name** like <yourname>\_jdkjob
4. Select **Freestyle project**
5. Click **OK**

*Job Details screen should be displayed.*

1. Under **General** Tab, New field **JDK**  should be present.
2. Select the version 9 of jdk you want your job to run on.
3. Under **Build** section, Click **Add Build Step** and select **Execute Shell**
4. Enter **Command**  as echo $JAVA\_HOME
5. Click  **Save**
6. Click on **Build Now**
7. A new triggered build number will appear under Build History.
8. Click on Build #
9. Clcik on Left Panel->Console Output
10. View the Log it is showing the actions being taken by Jenkins for JDK
11. At last , it will show the path of installed java.
12. Repeat steps 42, 45-51 to see installation and selection of different versions of jdk