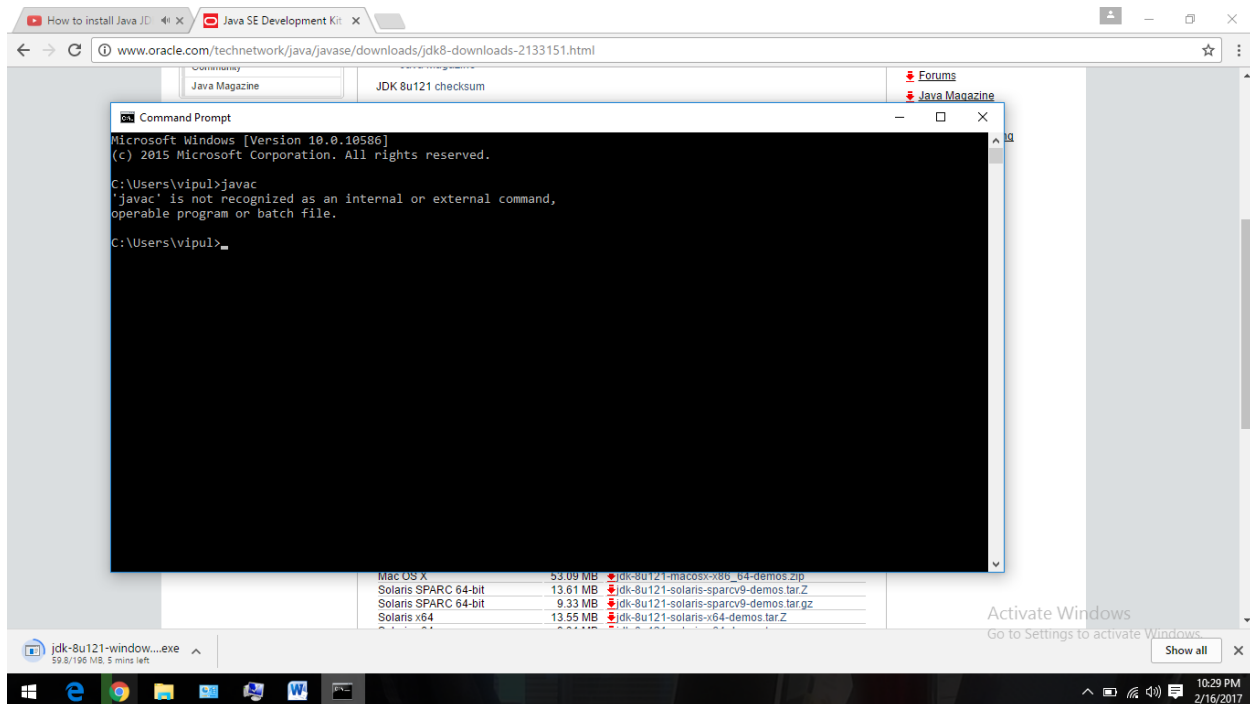


🔗 To check if Java JDK is installed or not

Use command

Javac



If it says 'javac' is not recognized as an internal or external command this means Java is not installed so get it installed first

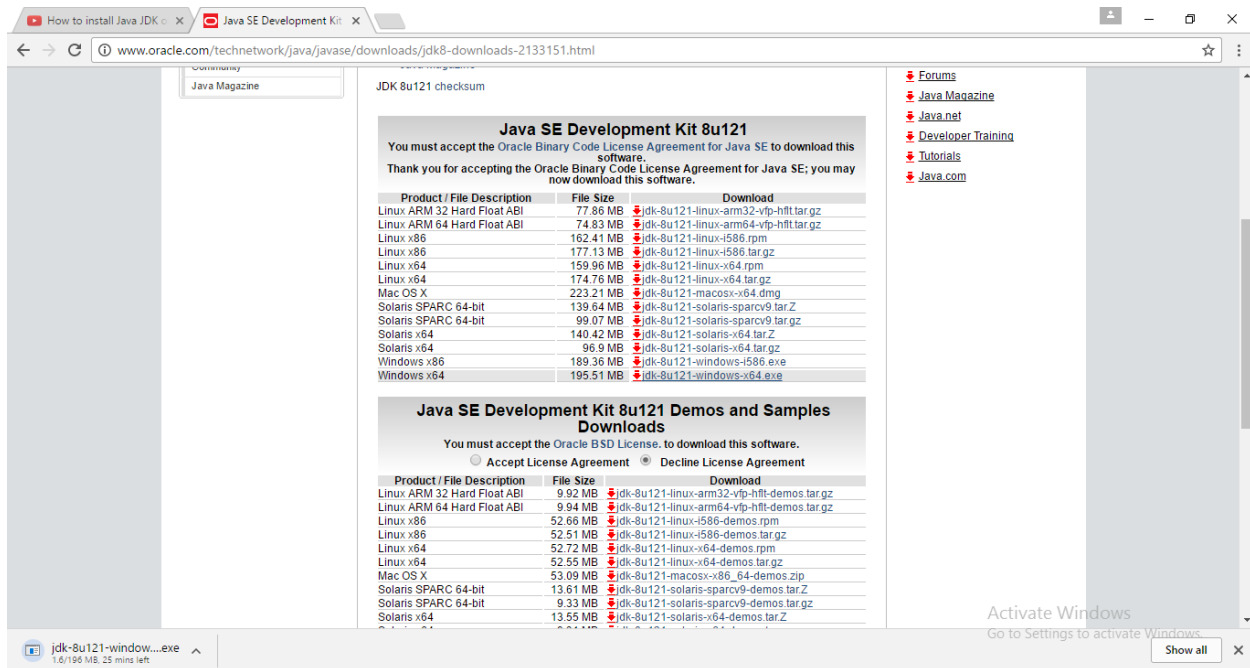
🔗 JDK installation

Search on Google Java JDK

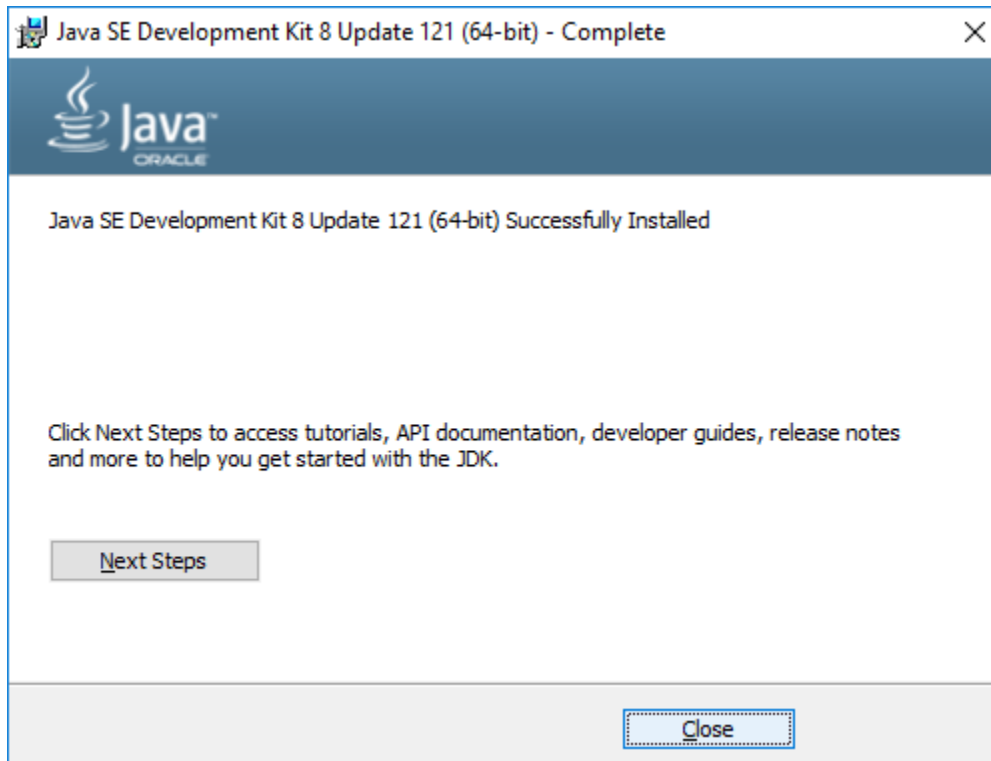
Select Java Download from <http://www.oracle.com/technetwork/java/javase/downloads/index-jsp-138363.html>

Accept the License agreement and download appropriate file

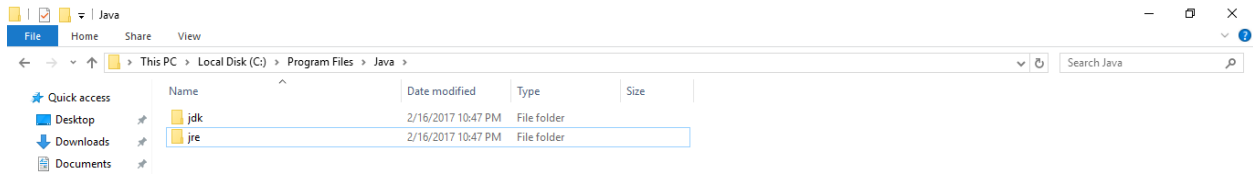
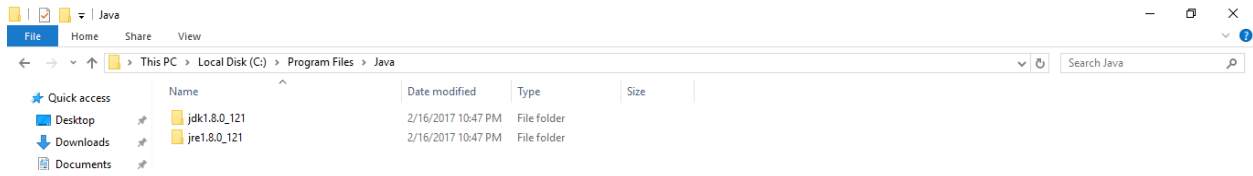
Select appropriate version and download



Once download is completed install the same



On completion of installation check JDK and JRE folder and rename them with JDK and JRE

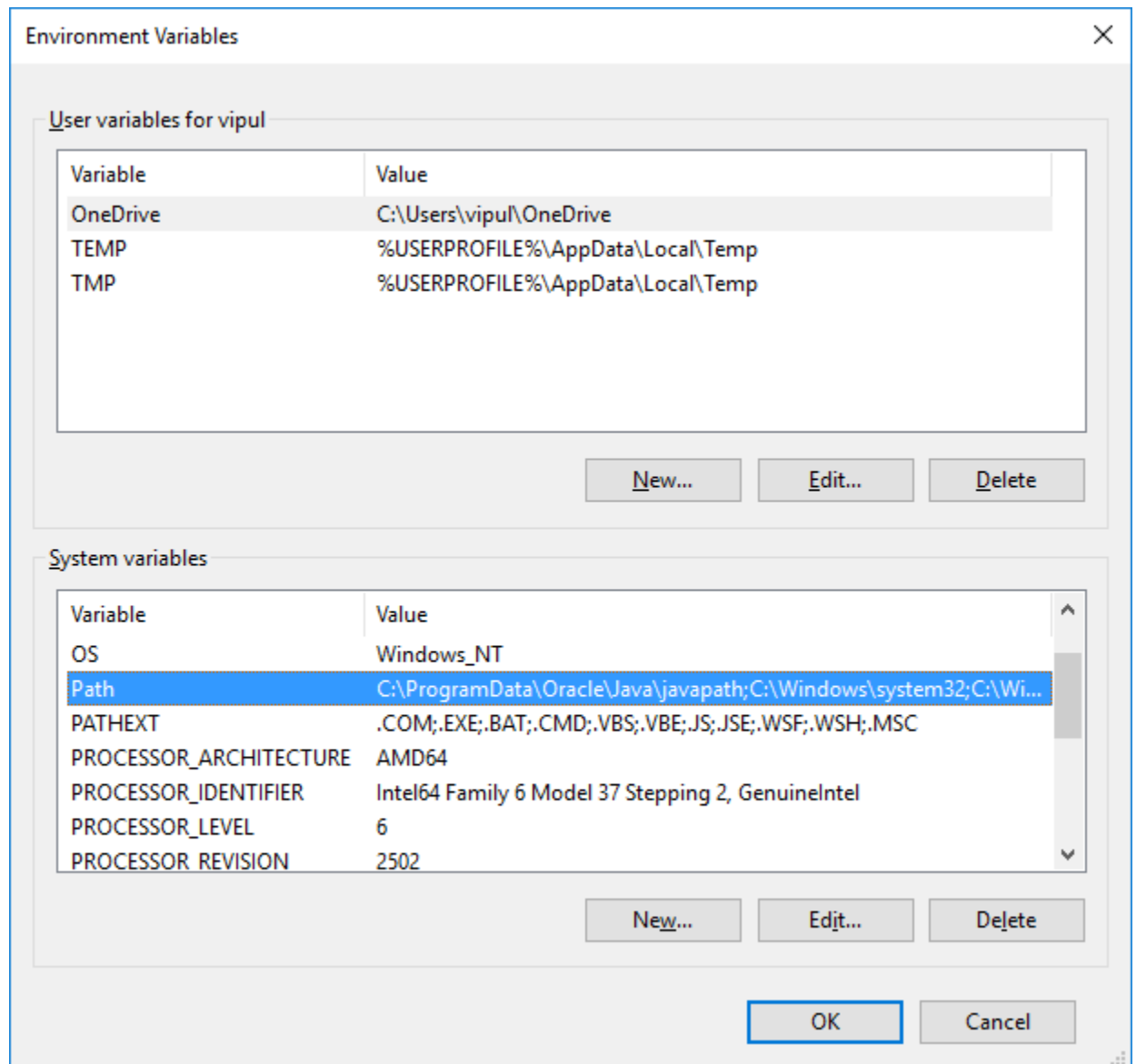




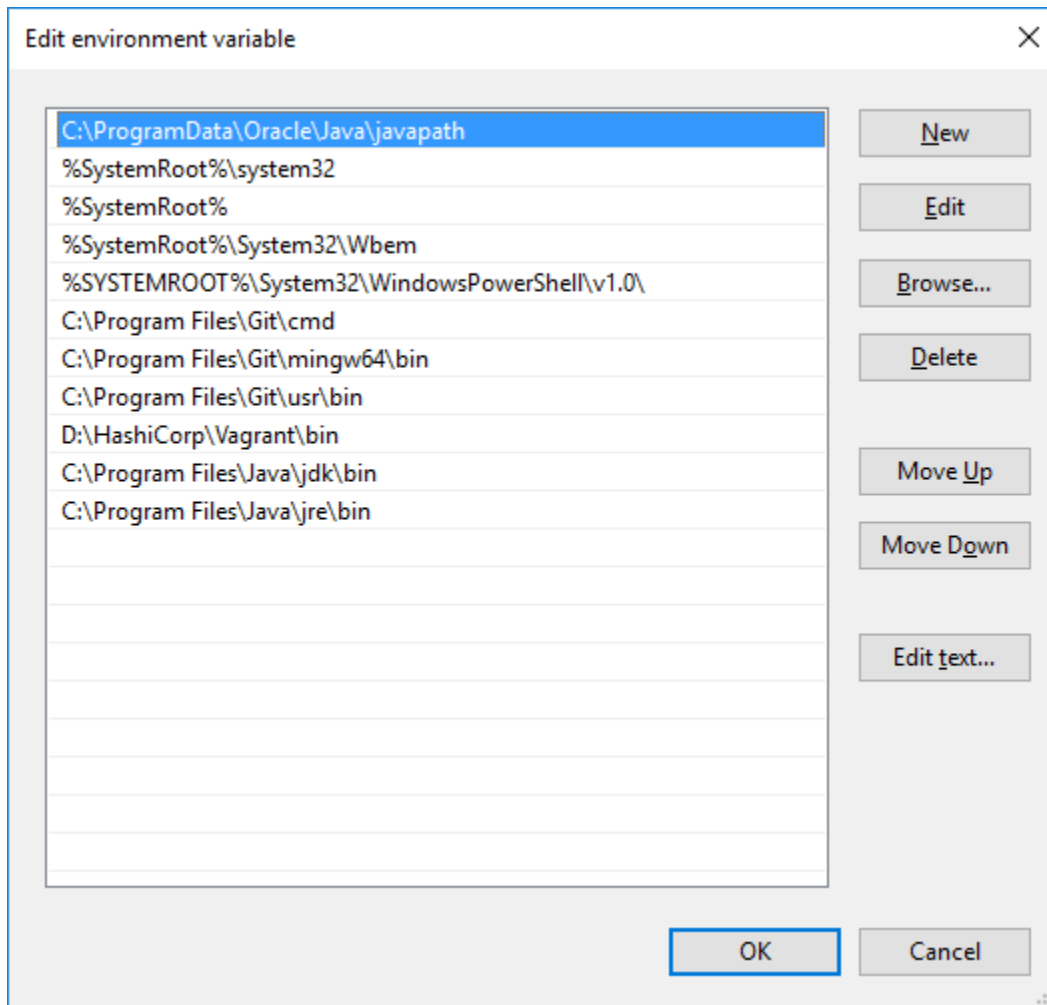
To set up Environment variable

Go to Control Panel → System → Advance System Setting → Environmnet variable

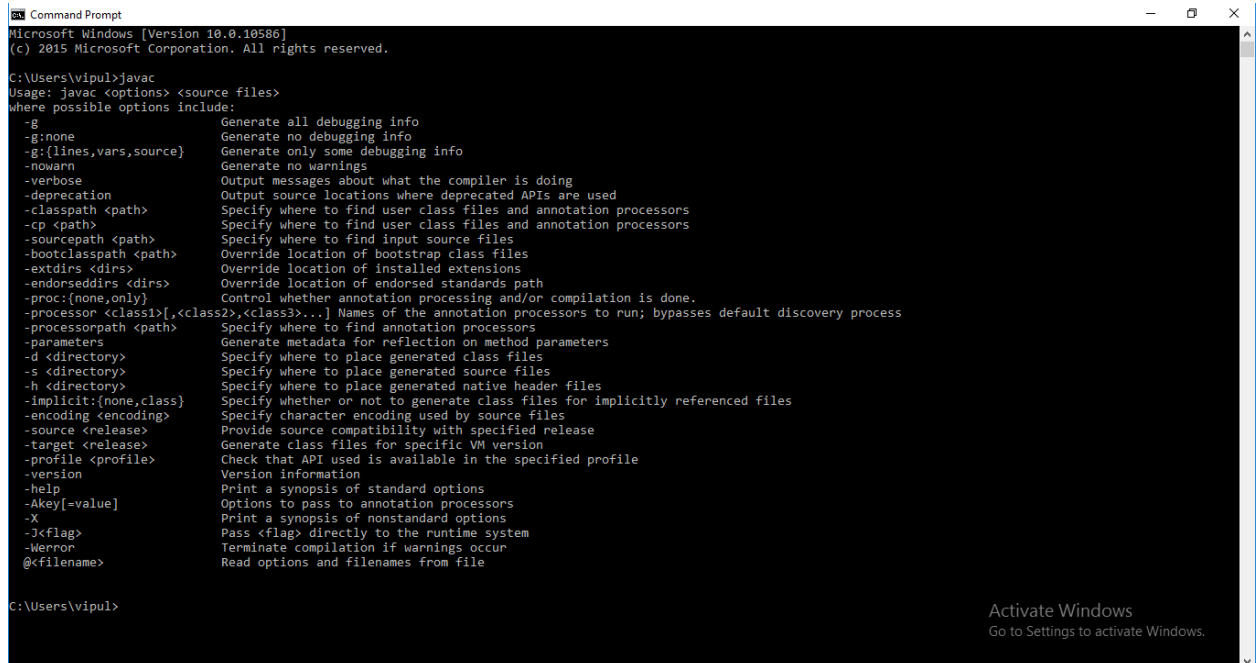
Select Path



Double click on path and add JDK and JRE folder till bin



Go to command prompt and provide with command JAVAC to check if java is available



```
Command Prompt
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Users\vipul>javac
Usage: javac <options> <source files>
where possible options include:
  -g               Generate all debugging info
  -g:none          Generate no debugging info
  -g:{lines,vars,source}  Generate only some debugging info
  -nowarn          Generate no warnings
  -verbose         Output messages about what the compiler is doing
  -deprecation     Output source locations where deprecated APIs are used
  -classpath <path>  Specify where to find user class files and annotation processors
  -cp <path>        Specify where to find user class files and annotation processors
  -sourcepath <path> Specify where to find input source files
  -bootclasspath <path>  Override location of bootstrap class files
  -extdirs <dirs>      Override location of installed extensions
  -endorseddirs <dirs>  Override location of endorsed standards path
  -proc:{none,only}  Control whether annotation processing and/or compilation is done.
  -processor <class1>[,<class2>,<class3>...] Names of the annotation processors to run; bypasses default discovery process
  -processorpath <path> Specify where to find annotation processors
  -parameters      Generate metadata for reflection on method parameters
  -d <directory>    Specify where to place generated class files
  -s <directory>    Specify where to place generated source files
  -h <directory>    Specify where to place generated native header files
  -implicit:{none,class} Specify whether or not to generate class files for implicitly referenced files
  -encoding <encoding> Specify character encoding used by source files
  -source <release>  Provide source compatibility with specified release
  -target <release>  Generate class files for specific VM version
  -profile <profile> Check that API used is available in the specified profile
  -version          Version information
  -help            Print a synopsis of standard options
  -Akey[=value]    Options to pass to annotation processors
  -X              Print a synopsis of nonstandard options
  -J<flag>         Pass <flag> directly to the runtime system
  -Werror          Terminate compilation if warnings occur
  @<filename>      Read options and filenames from file

C:\Users\vipul>
```

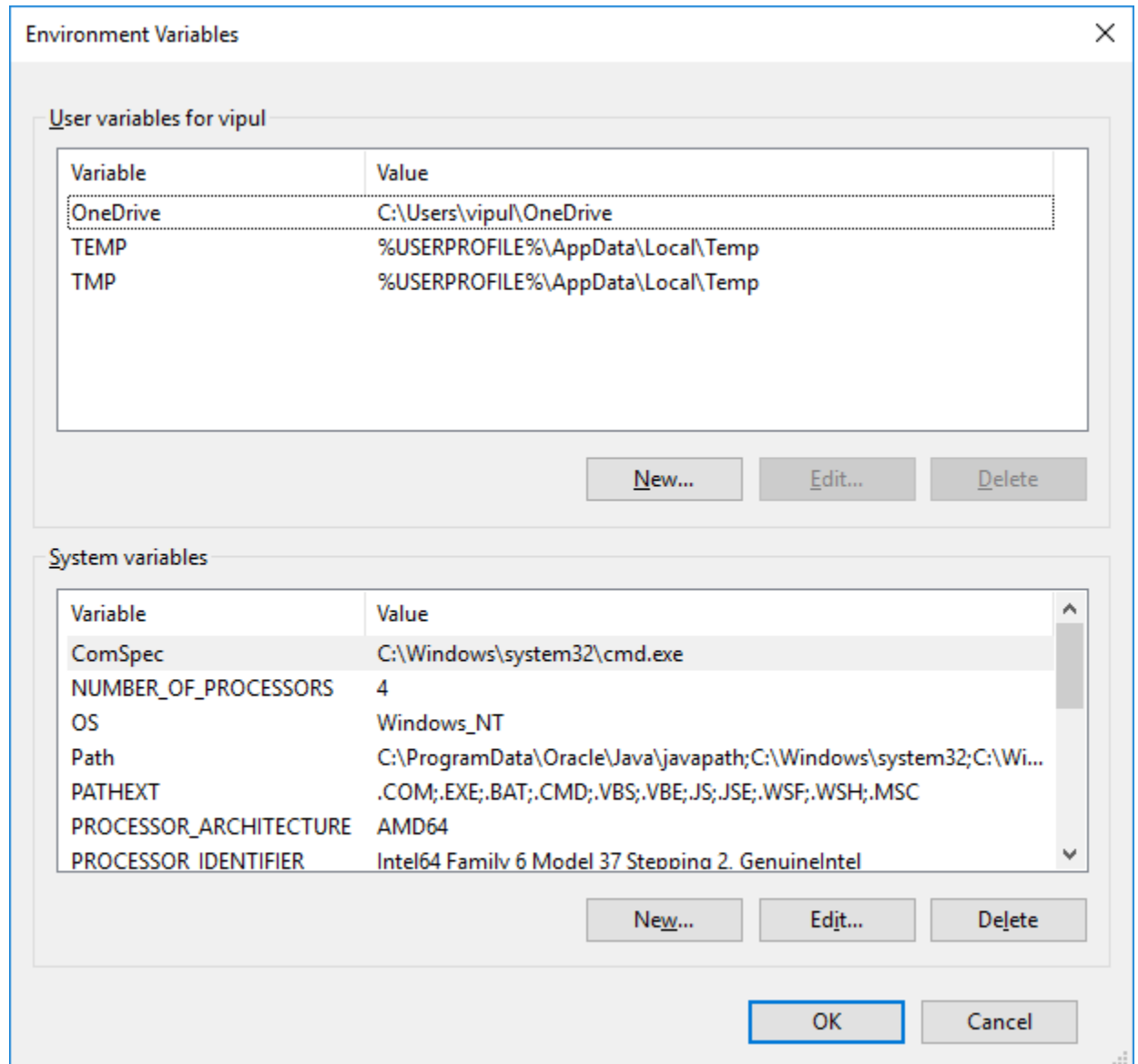
Activate Windows
Go to Settings to activate Windows.

Maven installation

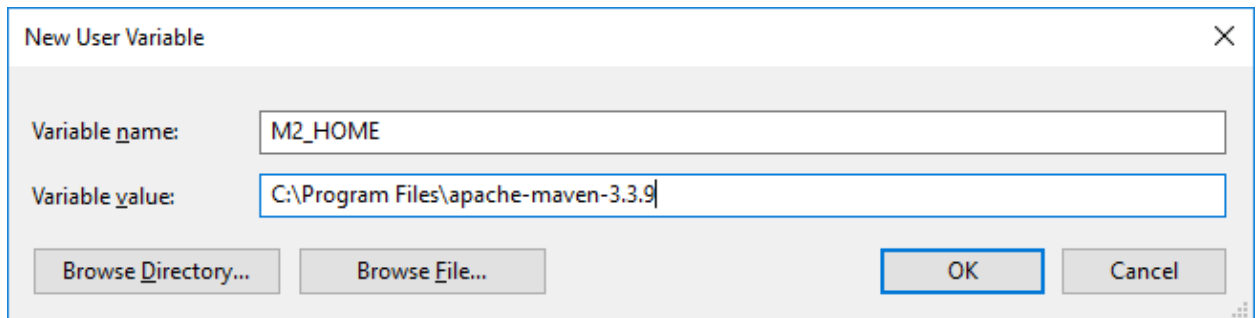
Get Maven Zip file from internet and download

Extract the same and put it in your Desired location in my case this is in **C:\Program Files\apache-maven-3.3.9** here in BIN folder we have maven executable file

Now Go to Control Panel → System → Advance Setting → Environment variable



Use Variable and Select New and provide value for Variable name and its value as shown below



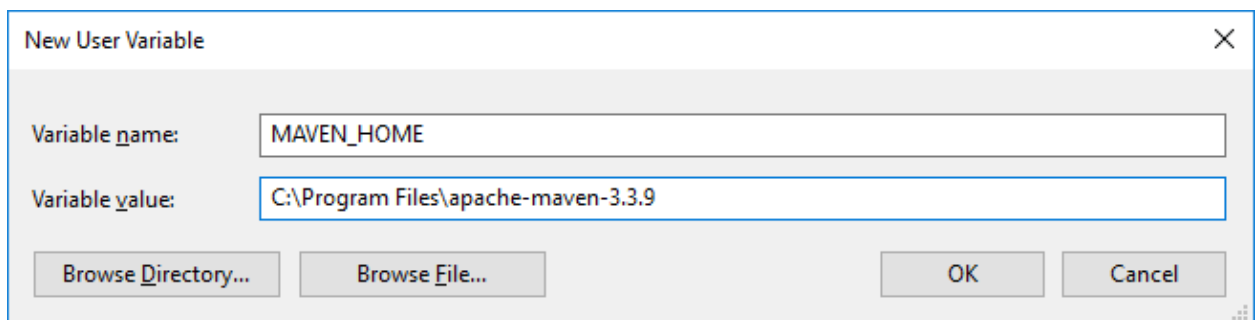
New User Variable

Variable name: M2_HOME

Variable value: C:\Program Files\apache-maven-3.3.9

Browse Directory... Browse File... OK Cancel

Create one More Variable name and Value for Maven as shown below

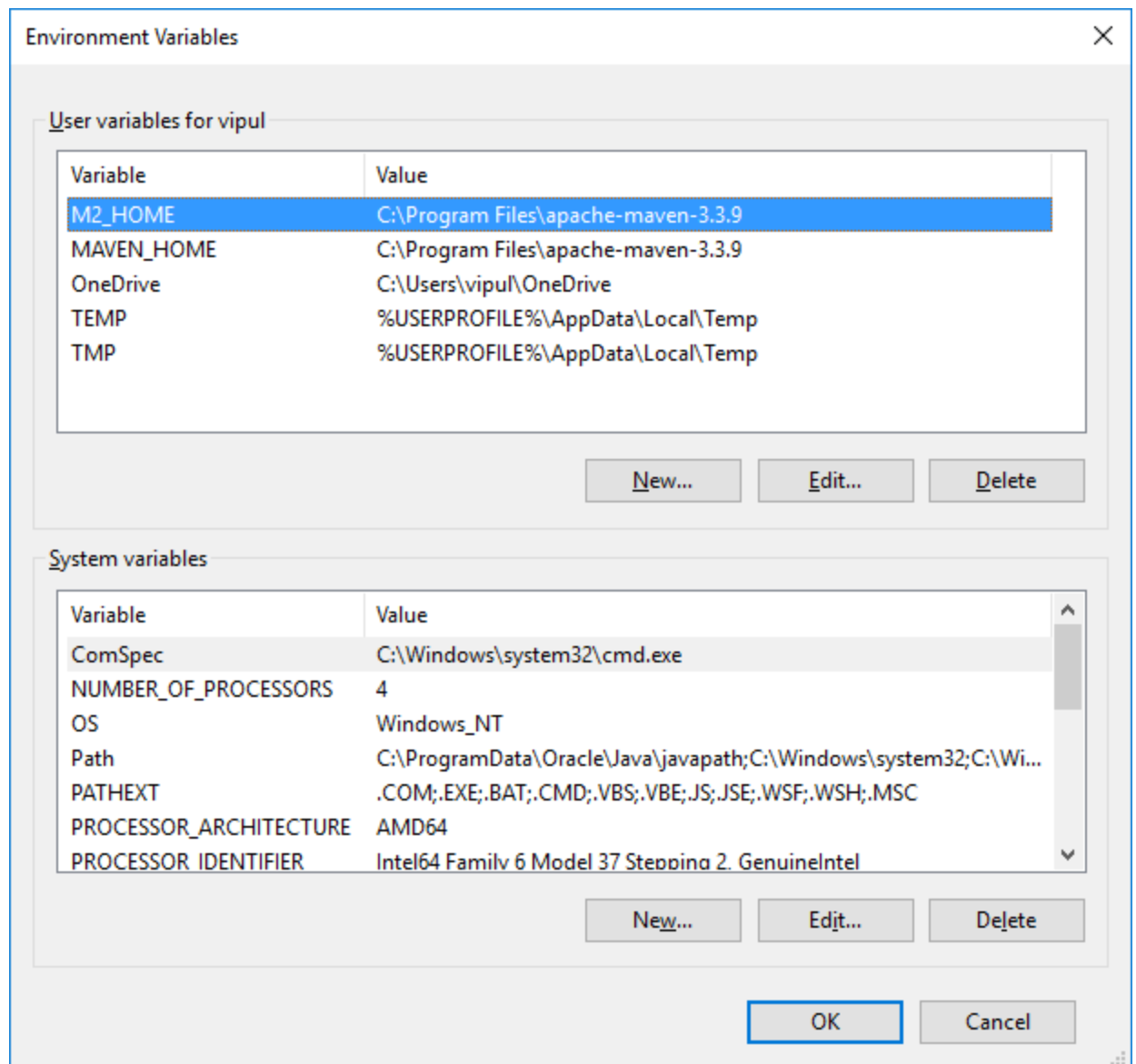


New User Variable

Variable name: MAVEN_HOME

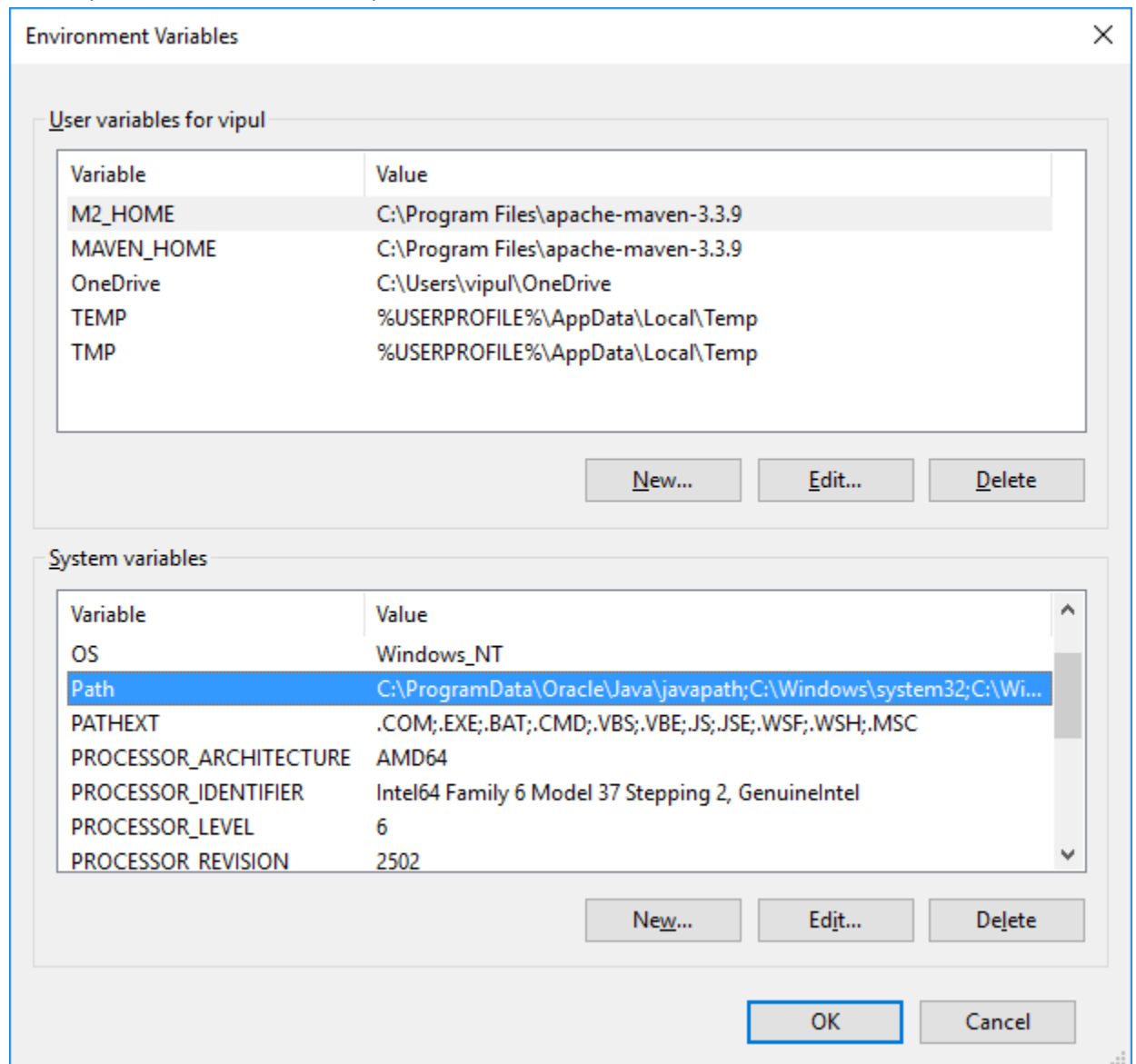
Variable value: C:\Program Files\apache-maven-3.3.9

Browse Directory... Browse File... OK Cancel

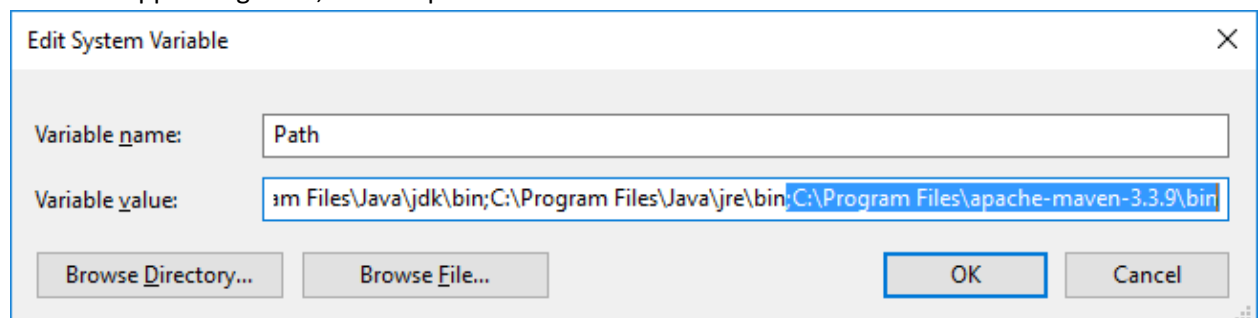


Next step is to take path of Maven Bin folder in my case its **C:\Program Files\apache-maven-3.3.9\bin**

Go to System Variable and select path

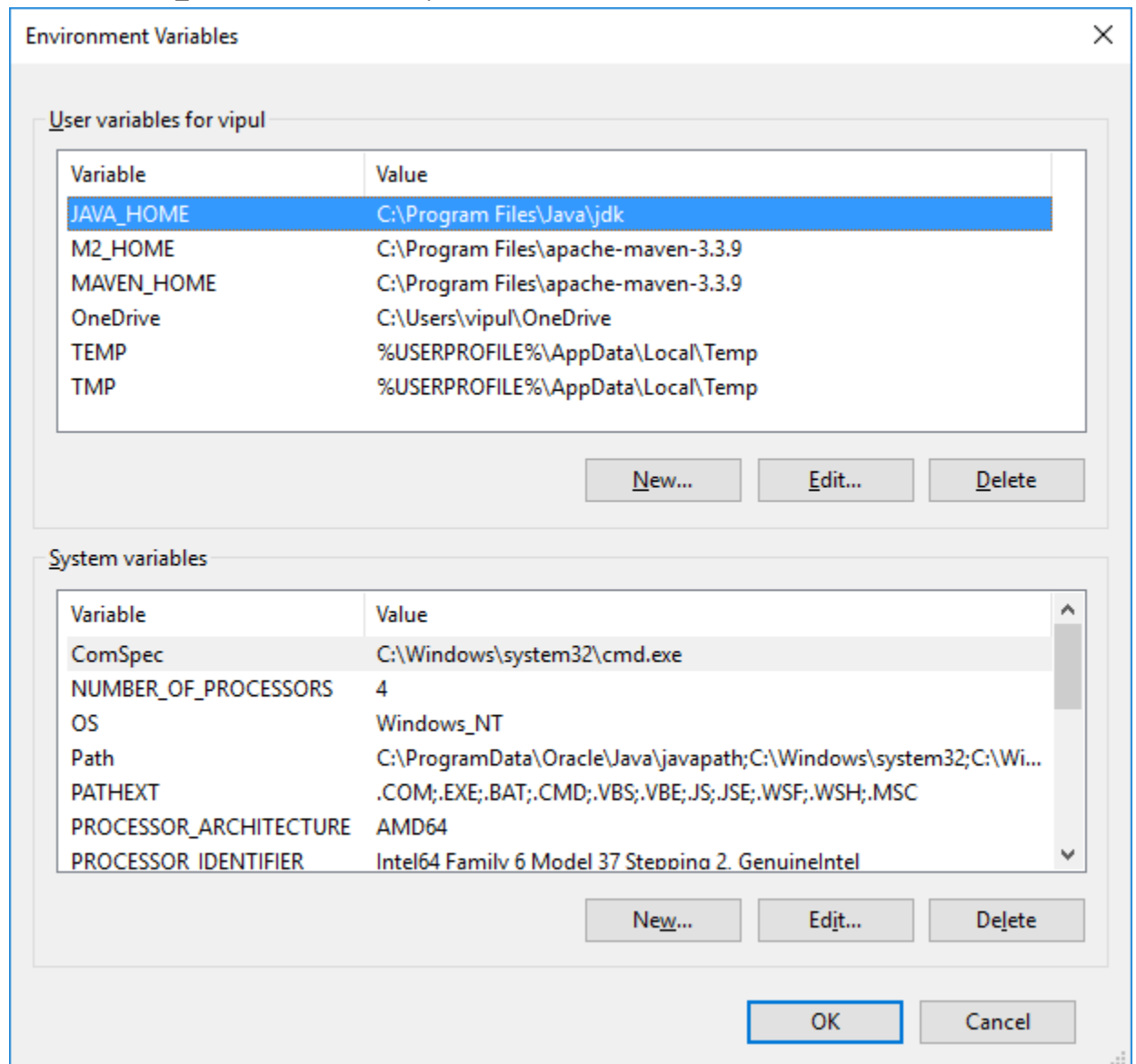


Edit Path appending with ; and Bin path as shown below

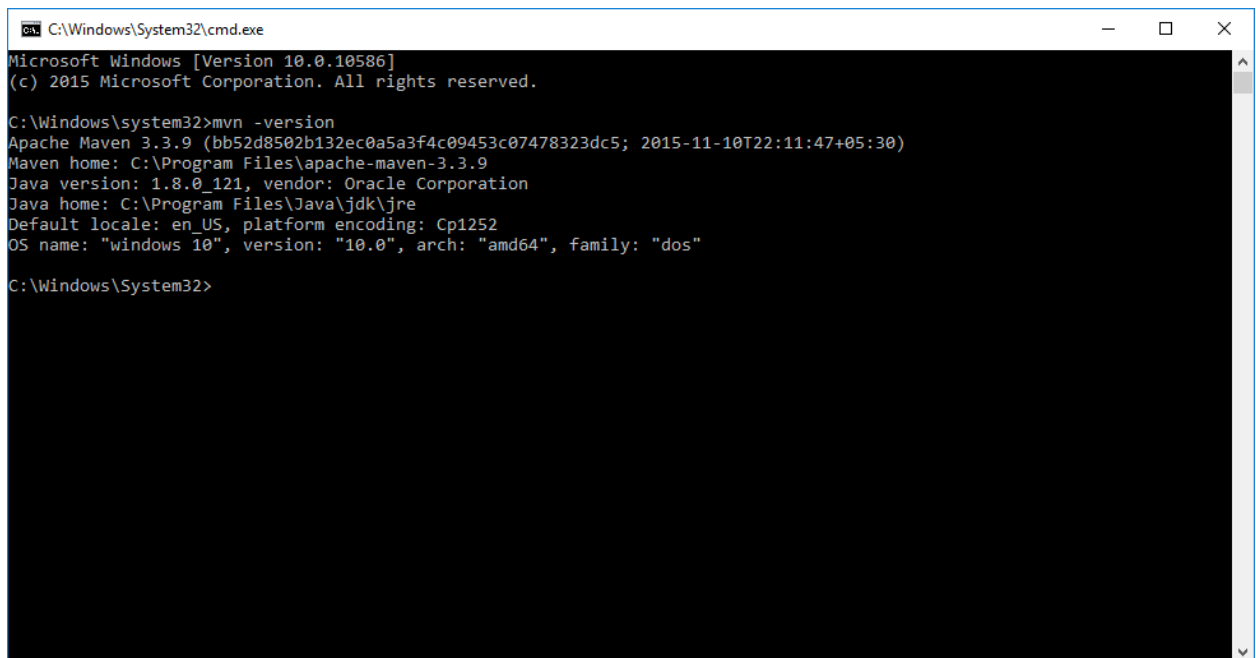


Click Ok and Maven installation is complete

Also Note JAVA_HOME should also be presented in environment variable



Once this is done reboot the system and give command `MVN -VERSION` to check if Maven is installed



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Windows\system32>mvn -version
Apache Maven 3.3.9 (bb52d8502b132ec0a5a3f4c09453c07478323dc5; 2015-11-10T22:11:47+05:30)
Maven home: C:\Program Files\apache-maven-3.3.9
Java version: 1.8.0_121, vendor: Oracle Corporation
Java home: C:\Program Files\Java\jdk\jre
Default locale: en_US, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "dos"

C:\Windows\System32>
```

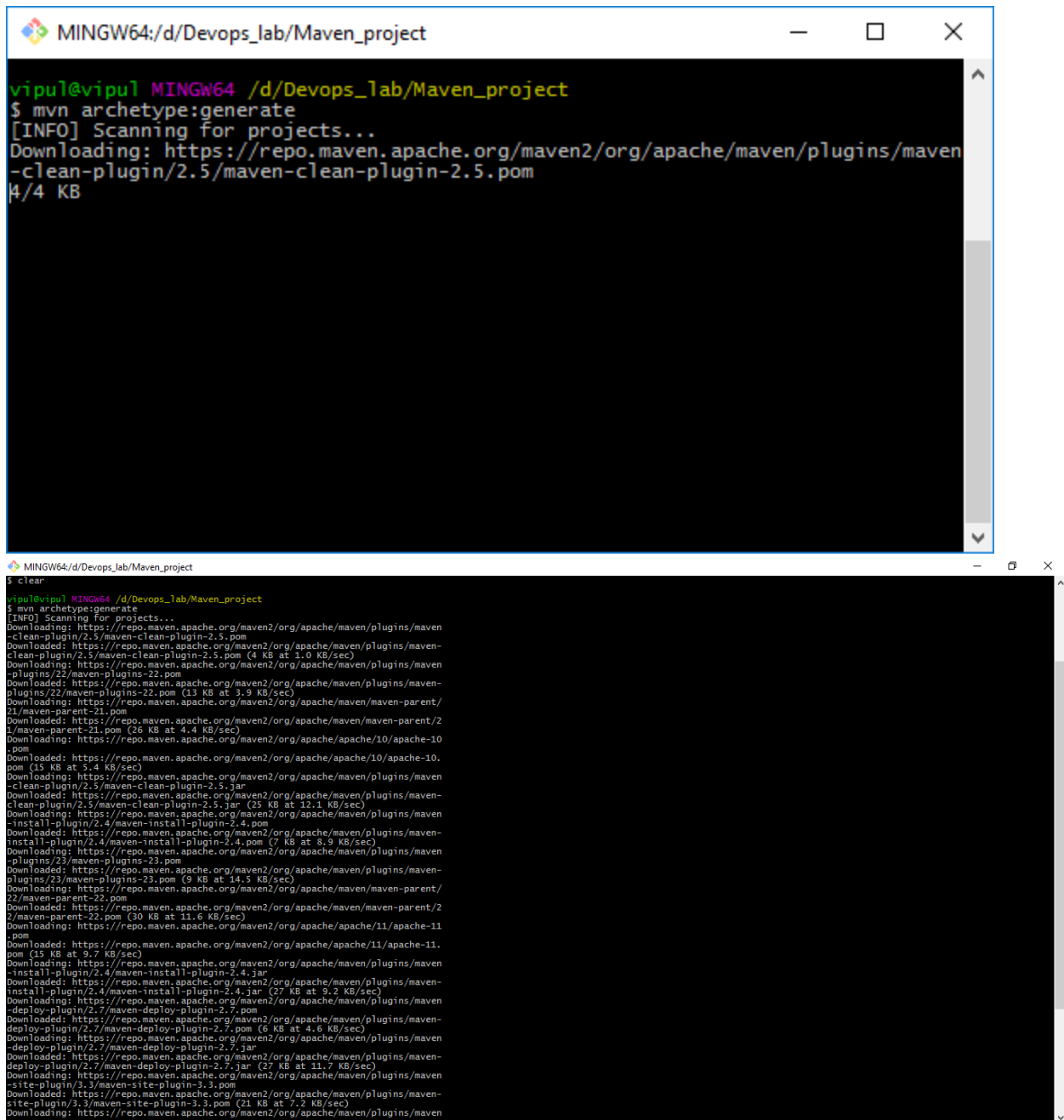
🚦 To create first Maven Project

Create directory where you want to create maven project

In my case **D:\Devops_lab\Maven_project**

Go to command prompt and make sure you are in directory where maven project wanted to be created and give below command this will download the required plugin for first time make sure internet is connected

archetype:generate



The image shows two screenshots of a Windows command prompt window titled "MINGW64:/d/Devops_lab/Maven_project".

The top screenshot shows the command `$ mvn archetype:generate` being executed. The output includes:

```
[INFO] Scanning for projects...
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.pom
4/4 KB
```

The bottom screenshot shows the command `$ mvn archetype:generate` being executed again. The output is more extensive, showing the download of various Maven plugins and their parent POMs:

```
[INFO] Scanning for projects...
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.pom (4 KB at 1.0 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/22/maven-plugins-22.pom (13 KB at 3.9 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/21/maven-parent-21.pom (26 KB at 4.4 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/apache/10/apache-10.pom (15 KB at 5.4 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.jar (25 KB at 12.1 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-install-plugin/2.4/maven-install-plugin-2.4.pom (7 KB at 8.9 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/23/maven-plugins-23.pom (9 KB at 14.5 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/22/maven-parent-22.pom (30 KB at 11.6 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/apache/11/apache-11.pom (15 KB at 9.7 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-install-plugin/2.4/maven-install-plugin-2.4.jar (27 KB at 9.2 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-deploy-plugin/2.7/maven-deploy-plugin-2.7.pom (6 KB at 4.6 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-deploy-plugin/2.7/maven-deploy-plugin-2.7.jar (27 KB at 11.7 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-site-plugin/3.3/maven-site-plugin-3.3.pom (21 KB at 7.2 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-site-plugin/3.3/maven-site-plugin-3.3.pom (21 KB at 7.2 KB/sec)
```

```

MINGW64/d/Devops_lab/Maven_project
1742: remote -> org.zkoss:zk-archetype-extension (An archetype that generates a starter ZK extension project)
1743: remote -> org.zkoss:zk-archetype-theme (An archetype that generates a starter ZK theme project)
1744: remote -> org.zkoss:zk-archetype-webapp (An archetype that generates a starter ZK EE webapp project)
1745: remote -> org.zkoss:zk-ee-eval-archetype-webapp (An archetype that generates a starter ZK EE-eval webapp project)
1746: remote -> org.zkoss:zk-ee-eval-archetype-webapp-spring (An archetype that generates a starter ZK EE-eval webapp project with Spring)
1747: remote -> org.zkoss:zk-ee-eval-archetype-webapp-spring-jpa (An archetype that generates a starter ZK EE-eval webapp project with Spring and JPA)
1748: remote -> pl.bristleback:webapp-archetype (Web archetype for Bristleback Websocket Framework)
1749: remote -> pl.najda:dw-archetype (Archetype for building an initial structure of directories and files for Dropwizard web services. Contains a simple web service (available at http://localhost:8082/hello-von-wild-sources - to simplify development.)
1750: remote -> pl.org.mikis:scala-quickstart-archetype (Customizable cruft-free Scala archetype. Options:
--testLibrary: [junit, testng, none]. DEFAULT: junit. Adds the requested test library to the POM deps.
--compilerMode: [simple, test-only, retrolambda-main, retrolambda-all]. DEFAULT: simple.
--simple: everything is compiled as Java 8.
--test-only: set up test for Java 8, and main for Java 7.
--retrolambda-main: main code is compiled as Java 8, and then converted to Java 7 via retrolambda.
--retrolambda-all: all code is compiled as Java 8, and then converted to Java 7 via retrolambda.

NOTE: Retrolambda support provided "as is" - if you have any problems, please file a ticket on the GitHub page!
1751: remote -> pl.org.mikis:scala-quickstart-archetype (Customizable cruft-free Scala archetype. Options:
--sourceFolders: [all-in-src-java, scala-only, both-split-src]. DEFAULT: all-in-src-java.
--all-in-src-java: Scala and Java code are both in src/main/java (same for test). Plays nicely with IDEs.
--scala-only: only src/main/scala set up, and set as source folder.
--both-split-src: both src/main/java and src/main/scala. Can play merry havoc with IDEs, so not the default.
--testLibrary: [scalatest, specs2, scalacheck-only, junit-only]. DEFAULT: scalatest.
--scalatest: adds Scalatest AND Scalacheck AND JUnit for most of your testing needs.
--specs2: adds specs2 AND Scalacheck AND JUnit.
--scalacheck-junit: adds Scalacheck AND JUnit.
--junit-only: adds JUnit ONLY.
--scalaVersion: 2.10.x+. DEFAULT: 2.11.2.
--The Scala tool version is generated automatically.
--Some Scala versions may not be compatible with selected test library versions. Adjust as necessary.)
1752: remote -> pro.savant:circumflex:webapp-archetype (-)
1753: remote -> ro.pippop:piippo-quickstart (-)
1754: remote -> ru.circumflex:circumflex-archetype (-)
1755: remote -> ru.nikitav:android.archetypes:release (-)
1756: remote -> ru.nikitav:android.archetypes:release-roboelectric (-)
1757: remote -> ru.stqa.selenium:webdriver-junit-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and JUnit/TestNG)
1758: remote -> ru.stqa.selenium:webdriver-junit-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and JUnit)
1759: remote -> ru.stqa.selenium:webdriver-testing-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and TestNG)
1760: remote -> ru.yandex.cocaine:cocaine-client-archetype (Archetype for creating a basic client for Cocaine Application Engine.)
1761: remote -> ru.yandex.cocaine:cocaine-worker-archetype (Archetype for creating a basic worker for Cocaine Application Engine.)
1762: remote -> ru.yandex.qatools:camelot:camelot-plugin (-)
1763: remote -> se.vgregion:javg.maven.archetypes:javg-minimal-archetype (-)
1764: remote -> se.walkercro:ghp-maven-archetype (Quickstart for developers wanting to integrate the GHP Maven Plugin)
1765: remote -> sk.seges.sesam:sesam-annotation-archetype (-)
1766: remote -> tk.skuro:clojure-maven-archetype (A simple Maven archetype for Clojure)
1767: remote -> tr.com.lucidcode:kite-archetype (A Maven Archetype that allows users to create a Fresh Kite project)
1768: remote -> tr.com.obss.sdlc:archetype:obss-archetype-java (This archetype provides a common skelton for the Java packages.)
1769: remote -> tr.com.obss.sdlc:archetype:obss-archetype-webapp (This archetype provides a skelton for the Java Web Application packages.)
1770: remote -> uk.ac.ebi.gxa:atlas-archetype (Archetype for generating a custom Atlas webapp)
1771: remote -> uk.ac.rdg.resc:edal-ncms-based-webapp (-)
1772: remote -> uk.co.nemstix:basic-javase7-archetype (A basic Java EE7 Maven archetype)
1773: remote -> uk.co.solong:angular-spring-archetype (So Long archetype for RESTful spring services with an AngularJS frontend. Includes debian deployment)
1774: remote -> us.fatehi:ischema:crawler-archetype-maven-project (-)
1775: remote -> us.fatehi:ischema:crawler-archetype-plugin-command (-)
1776: remote -> us.fatehi:ischema:crawler-archetype-plugin-dbconnector (-)
1777: remote -> us.fatehi:ischema:crawler-archetype-plugin-lint (-)
Choose a number or apply filter (format: [groupid]:artifactid, case sensitive contains): 930: ]

```

Number defines the **archetype ID** which is template that you can select By default it select one number which is sample maven project this number varies. use number that you want to select if you leave blank and enter it will select default one

```

MINGW64/d/Devops_lab/Maven_project
1750: remote -> pl.org.mikis:java8-quickstart-archetype (Basic Java 8 archetype. Options:
--testLibrary: [junit, testng, none]. DEFAULT: junit. Adds the requested test library to the POM deps.
--compilerMode: [simple, test-only, retrolambda-main, retrolambda-all]. DEFAULT: simple.
--simple: everything is compiled as Java 8.
--test-only: set up test for Java 8, and main for Java 7.
--retrolambda-main: main code is compiled as Java 8, and then converted to Java 7 via retrolambda.
--retrolambda-all: all code is compiled as Java 8, and then converted to Java 7 via retrolambda.

NOTE: Retrolambda support provided "as is" - if you have any problems, please file a ticket on the GitHub page!
1751: remote -> pl.org.mikis:scala-quickstart-archetype (Customizable cruft-free Scala archetype. Options:
--sourceFolders: [all-in-src-java, scala-only, both-split-src]. DEFAULT: all-in-src-java.
--all-in-src-java: Scala and Java code are both in src/main/java (same for test). Plays nicely with IDEs.
--scala-only: only src/main/scala set up, and set as source folder.
--both-split-src: both src/main/java and src/main/scala. Can play merry havoc with IDEs, so not the default.
--testLibrary: [scalatest, specs2, scalacheck-only, junit-only]. DEFAULT: scalatest.
--scalatest: adds Scalatest AND Scalacheck AND JUnit for most of your testing needs.
--specs2: adds specs2 AND Scalacheck AND JUnit.
--scalacheck-junit: adds Scalacheck AND JUnit.
--junit-only: adds JUnit ONLY.
--scalaVersion: 2.10.x+. DEFAULT: 2.11.2.
--The Scala tool version is generated automatically.
--Some Scala versions may not be compatible with selected test library versions. Adjust as necessary.)
1752: remote -> pro.savant:circumflex:webapp-archetype (-)
1753: remote -> ro.pippop:piippo-quickstart (-)
1754: remote -> ru.circumflex:circumflex-archetype (-)
1755: remote -> ru.nikitav:android.archetypes:release (-)
1756: remote -> ru.nikitav:android.archetypes:release-roboelectric (-)
1757: remote -> ru.stqa.selenium:webdriver-junit-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and JUnit/TestNG)
1758: remote -> ru.stqa.selenium:webdriver-junit-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and JUnit)
1759: remote -> ru.stqa.selenium:webdriver-testing-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and TestNG)
1760: remote -> ru.yandex.cocaine:cocaine-client-archetype (Archetype for creating a basic client for Cocaine Application Engine.)
1761: remote -> ru.yandex.cocaine:cocaine-worker-archetype (Archetype for creating a basic worker for Cocaine Application Engine.)
1762: remote -> ru.yandex.qatools:camelot:camelot-plugin (-)
1763: remote -> se.vgregion:javg.maven.archetypes:javg-minimal-archetype (-)
1764: remote -> se.walkercro:ghp-maven-archetype (Quickstart for developers wanting to integrate the GHP Maven Plugin)
1765: remote -> sk.seges.sesam:sesam-annotation-archetype (-)
1766: remote -> tk.skuro:clojure-maven-archetype (A simple Maven archetype for Clojure)
1767: remote -> tr.com.lucidcode:kite-archetype (A Maven Archetype that allows users to create a Fresh Kite project)
1768: remote -> tr.com.obss.sdlc:archetype:obss-archetype-java (This archetype provides a common skelton for the Java packages.)
1769: remote -> tr.com.obss.sdlc:archetype:obss-archetype-webapp (This archetype provides a skelton for the Java Web Application packages.)
1770: remote -> uk.ac.ebi.gxa:atlas-archetype (Archetype for generating a custom Atlas webapp)
1771: remote -> uk.ac.rdg.resc:edal-ncms-based-webapp (-)
1772: remote -> uk.co.nemstix:basic-javase7-archetype (A basic Java EE7 Maven archetype)
1773: remote -> uk.co.solong:angular-spring-archetype (So Long archetype for RESTful spring services with an AngularJS frontend. Includes debian deployment)
1774: remote -> us.fatehi:ischema:crawler-archetype-maven-project (-)
1775: remote -> us.fatehi:ischema:crawler-archetype-plugin-command (-)
1776: remote -> us.fatehi:ischema:crawler-archetype-plugin-dbconnector (-)
1777: remote -> us.fatehi:ischema:crawler-archetype-plugin-lint (-)
Choose a number or apply filter (format: [groupid]:artifactid, case sensitive contains): 930: 930
Choose org.apache.maven.archetypes:maven-archetype-quickstart version:
1: 1.0-alpha-1
2: 1.0-alpha-2
3: 1.0-alpha-3
4: 1.0-alpha-4
5: 1.0
6: 1.1
Choose a number: 6:

```

Next step is it will provide you with 6 options this are the **archetype version** select the one you want we will select here option 6 which is latest version

```
MINGW64/d/Devops_lab/Maven_project
--scala-only: only src/main/scala set up, and set as source folder.
--both-split-src: both src/main/java and src/main/scala. Can play merry havoc with IDEs, so not the default.
--testLibrary: [scalatest, specs2, scalacheck-only, junit-only]. DEFAULT: scalatest.
--scalatest: adds Scalatest AND Scalacheck AND JUnit for most of your testing needs.
--specs2: adds specs2 AND Scalacheck AND JUnit.
--scalacheck-junit: adds Scalacheck AND JUnit.
--junit-only: adds JUnit ONLY.
--scalaVersion: 2.10.x*, DEFAULT: 2.11.2.
*The Scala tool version is generated automatically.
*Some Scala versions may not be compatible with selected test library versions. Adjust as necessary.)
1752: remote -> pro.savant.circumflex:webapp-archetype (-)
1753: remote -> ro.pippo:pippo-quickstart (-)
1754: remote -> ru.circumflex:circumflex-archetype (-)
1755: remote -> ru.nikitav.android.archetypes:release (-)
1756: remote -> ru.nikitav.android.archetypes:release-robotlectric (-)
1757: remote -> ru.stqa.selenium.webdriver-java-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and JUnit/TestNG)
1758: remote -> ru.stqa.selenium.webdriver-junit-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and JUnit)
1759: remote -> ru.stqa.selenium.webdriver-testing-archetype (Archetype for a Maven project intended to develop tests with Selenium WebDriver and TestNG)
1760: remote -> ru.yandex.cocaine:cocaine-client-archetype (Archetype for creating a basic client for Cocaine Application Engine.)
1761: remote -> ru.yandex.cocaine:cocaine-worker-archetype (Archetype for creating a basic worker for Cocaine Application Engine.)
1762: remote -> ru.yandex.qatools.camlot:camlot-plugin (-)
1763: remote -> se.vgregion.javg.maven.archetypes:javg-minimal-archetype (-)
1764: remote -> se.walkercrowd:ghp-maven-archetype (Quickstart for developers wanting to integrate the GHP Maven Plugin)
1765: remote -> sk.seges.sesam:sesam-annotation-archetype (-)
1766: remote -> tk.skuro:clojure-maven-archetype (A simple Maven archetype for Clojure)
1767: remote -> tr.com.lucidcode:kite-archetype (A Maven Archetype that allows users to create a Fresh Kite project)
1768: remote -> tr.com.obss.sdlc.archetype:obss-archetype-java (This archetype provides a common skelton for the Java packages.)
1769: remote -> tr.com.obss.sdlc.archetype:obss-archetype-webapp (This archetype provides a skelton for the Java Web Application packages.)
1770: remote -> uk.ac.abi.opastilis-archetype (Archetype for generating a custom Atlas webapp)
1771: remote -> uk.ac.rdg.resc:edial-nwms-based-webapp (-)
1772: remote -> uk.co.nemstix:basic-javase7-archetype (A basic Java EE7 Maven archetype)
1773: remote -> uk.co.solong:angular-spring-archetype (So Long archetype for RESTful spring services with an AngularJS frontend. Includes debian deployment)
1774: remote -> us.fatehi:schemacrawler-archetype-maven-project (-)
1775: remote -> us.fatehi:schemacrawler-archetype-plugin-command (-)
1776: remote -> us.fatehi:schemacrawler-archetype-plugin-dbconnector (-)
1777: remote -> us.fatehi:schemacrawler-archetype-plugin-lint (-)
Choose a number or apply filter (format: [groupId]:artifactId, case sensitive contains): 930: 930
Choose org.apache.maven.archetypes:maven-archetype-quickstart version:
1: 1.0-alpha-1
2: 1.0-alpha-2
3: 1.0-alpha-3
4: 1.0-alpha-4
5: 1.0
6: 1.1
Choose a number: 6
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.1/maven-archetype-quickstart-1.1.pom
Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.1/maven-archetype-quickstart-1.1.pom (2 KB at 1.1 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-bundles/4/maven-archetype-bundles-4.pom
Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-bundles/4/maven-archetype-bundles-4.pom (4 KB at 7.3 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/archetype/maven-archetype/2.0-alpha-5/maven-archetype-2.0-alpha-5.pom
Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/archetype/maven-archetype/2.0-alpha-5/maven-archetype-2.0-alpha-5.pom (9 KB at 11.2 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/16/maven-parent-16.pom
Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/16/maven-parent-16.pom (23 KB at 7.0 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/apache/7/apache-7.pom
Downloaded: https://repo.maven.apache.org/maven2/org/apache/apache/7/apache-7.pom (15 KB at 23.5 KB/sec)
Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.1/maven-archetype-quickstart-1.1.jar
Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.1/maven-archetype-quickstart-1.1.jar (7 KB at 10.1 KB/sec)
Define value for property 'groupId':
```

Next step is to define **Group ID** website of organization is provided in reverse **com.cts**,

After this we will be ask for **artifact ID** which is project name **MY_maven_project**

Now you will ask for **version** we will give same that is displayed **1.0-SNAPSHOT**, snapshot refers to development region

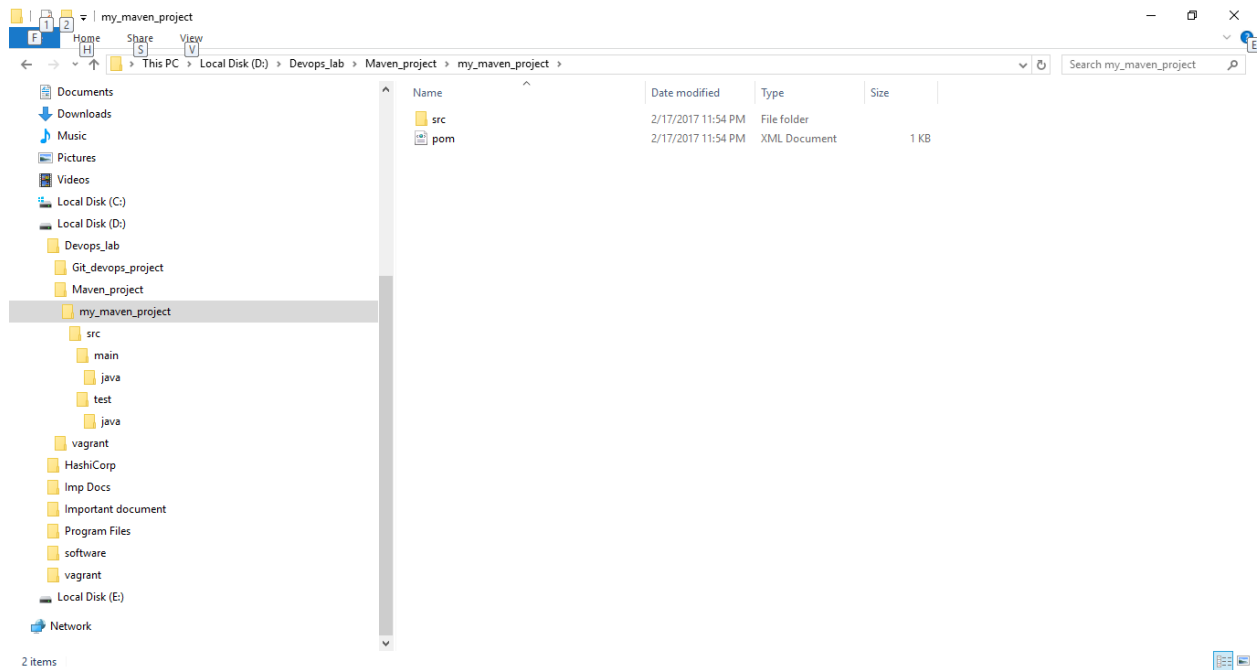
Now we will ask for **Package** we will use same and suffix demo since our project will be created in demo folder

Post this Maven will ask to confirm what all information you have provided

Confirm this by typing Y which will create your maven folder structure and will show if this is success

```
Define value for property 'groupId': com.cts
Define value for property 'artifactId': my_maven_project
Define value for property 'version': 1.0-SNAPSHOT
Define value for property 'package': com.cts: : com.cts.demo
Confirm properties configuration:
groupId: com.cts
artifactId: my_maven_project
version: 1.0-SNAPSHOT
package: com.cts.demo
Y: y
[INFO]
[INFO] Using following parameters for creating project from Old (1.x) Archetype: maven-archetype-quickstart:1.1
[INFO]
[INFO] Parameter: basedir, Value: D:\Devops_lab\Maven_project
[INFO] Parameter: package, Value: com.cts.demo
[INFO] Parameter: groupId, Value: com.cts
[INFO] Parameter: artifactId, Value: my_maven_project
[INFO] Parameter: packageName, Value: com.cts.demo
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] project created from Old (1.x) Archetype in dir: D:\Devops_lab\Maven_project\my_maven_project
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 01:00 h
[INFO] Finished at: 2017-02-17T23:54:12+05:30
[INFO] Final Memory: 13M/83M
[INFO]
vipul@vipul MINGW64 /d/Devops_lab/Maven_project
$
```

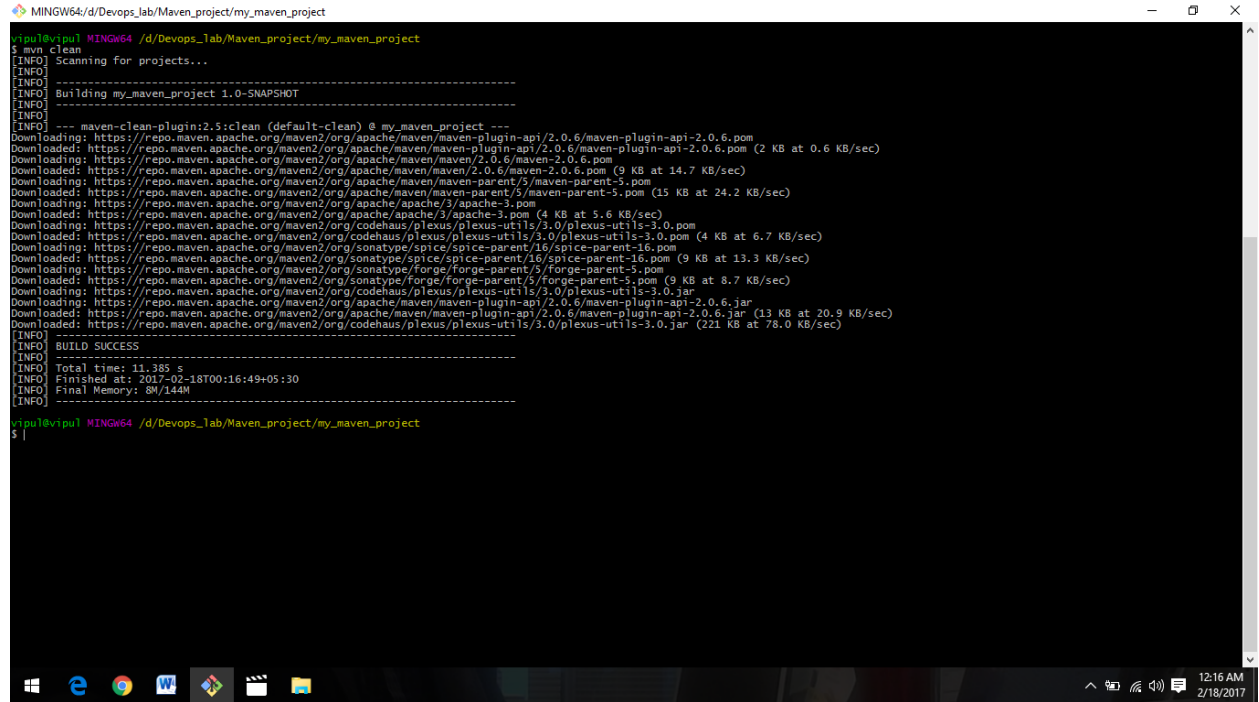
You can go to windows explorer and could see folder structure is created SRC,POM.XML,test and so on



🚦 To Clean,Compile,Run and Jar file creation

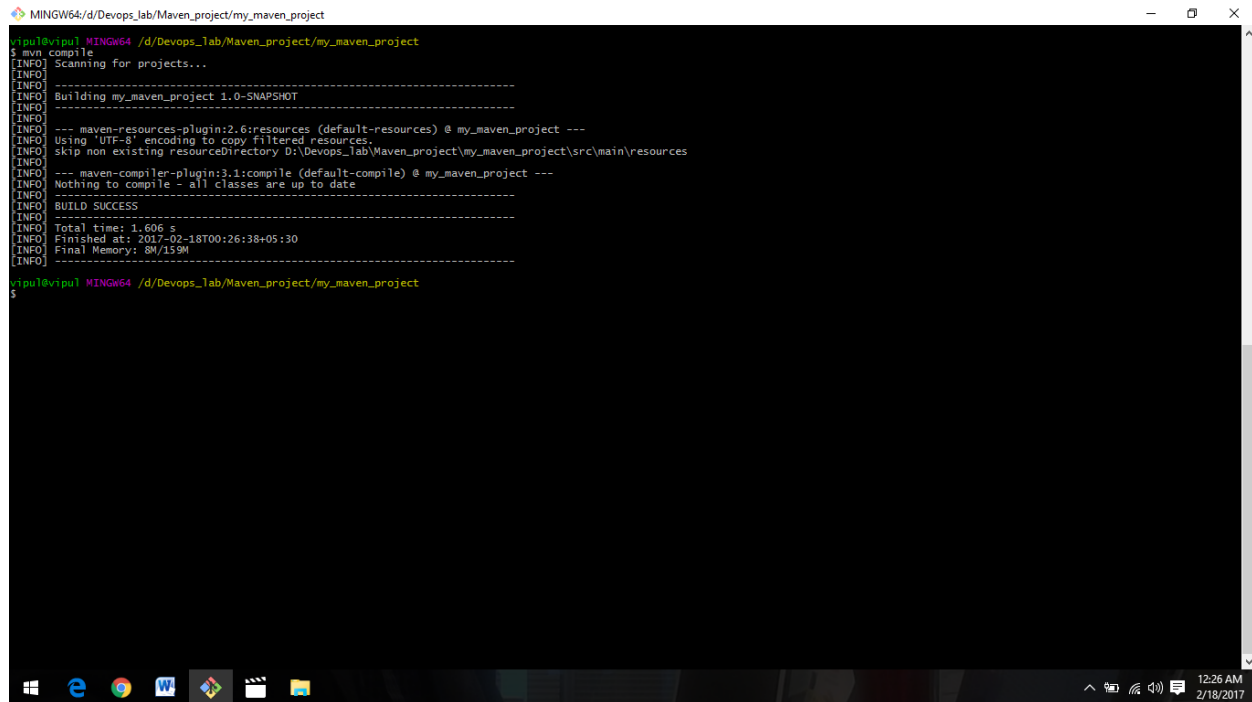
Go to maven project directory

1) MVN CLEAN -is used to clean the project



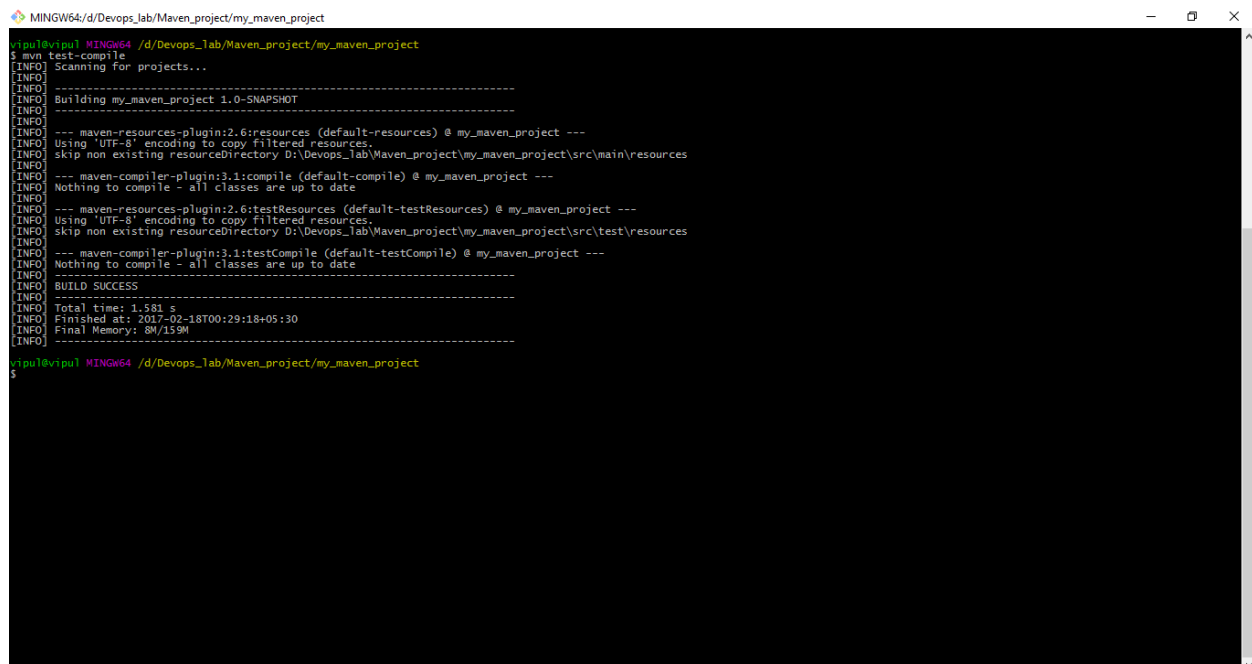
```
MINGW64/d/Devops_lab/Maven_project/my_maven_project
vipul@vipul1 MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$ mvn clean
[INFO] Scanning for projects...
[INFO]
[INFO] Building my_maven_project 1.0-SNAPSHOT
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ my_maven_project ---
[INFO]
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom (2 KB at 0.6 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom (2 KB at 0.6 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven/2.0.6/maven-2.0.6.pom (9 KB at 14.7 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/maven/2.0.6/maven-2.0.6.pom (9 KB at 14.7 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/5/maven-parent-5.pom (15 KB at 24.2 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/5/maven-parent-5.pom (15 KB at 24.2 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/apache/3/apache-3.pom (4 KB at 5.6 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/apache/3/apache-3.pom (4 KB at 5.6 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.pom (4 KB at 6.7 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.pom (4 KB at 6.7 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/sonatype/spice/spice-parent/16/spice-parent-16.pom (9 KB at 13.3 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/sonatype/spice/spice-parent/16/spice-parent-16.pom (9 KB at 13.3 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/sonatype/forge/forge-parent/5/forge-parent-5.pom (9 KB at 8.7 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/sonatype/forge/forge-parent/5/forge-parent-5.pom (9 KB at 8.7 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.jar (13 KB at 20.9 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.jar (13 KB at 20.9 KB/sec)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.jar (221 KB at 78.0 KB/sec)
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.jar (221 KB at 78.0 KB/sec)
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 11.385 s
[INFO] Finished at: 2017-02-18T00:16:49+05:30
[INFO] Final Memory: 8M/144M
[INFO]
vipul@vipul1 MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$ |
```

- 2) MVN compile to compile all source file of project if this fails run MVN install and then run compile



```
MINGW64/d/Devops_lab/Maven_project/my_maven_project
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$ mvn compile
[INFO] Scanning for projects...
[INFO]
[INFO] Building my_maven_project 1.0-SNAPSHOT
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ my_maven_project ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Devops_lab\Maven_project\my_maven_project\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ my_maven_project ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 1.606 s
[INFO] Finished at: 2017-02-18T00:26:38+05:30
[INFO] Final Memory: 8K/159M
[INFO]
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$
```

- 3) MVN TEST-COMPILE to compile your test



```
MINGW64/d/Devops_lab/Maven_project/my_maven_project
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$ mvn test-compile
[INFO] Scanning for projects...
[INFO]
[INFO] Building my_maven_project 1.0-SNAPSHOT
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ my_maven_project ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Devops_lab\Maven_project\my_maven_project\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ my_maven_project ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ my_maven_project ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Devops_lab\Maven_project\my_maven_project\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ my_maven_project ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 1.581 s
[INFO] Finished at: 2017-02-18T00:29:18+05:30
[INFO] Final Memory: 8K/159M
[INFO]
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$
```

4) MVN TEST to run test

```
MINGW64/d/Devops_lab/Maven_project/my_maven_project
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$ mvn test
[INFO] Scanning for projects...
[INFO]
[INFO] Building my_maven_project 1.0-SNAPSHOT
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ my_maven_project ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Devops_lab\Maven_project\my_maven_project\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ my_maven_project ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ my_maven_project ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Devops_lab\Maven_project\my_maven_project\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ my_maven_project ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ my_maven_project ---
[INFO] Surefire report directory: D:\Devops_lab\Maven_project\my_maven_project\target\surefire-reports

T E S T S
-----
Running com.cts.demo.AppTest
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.026 sec

Results :
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 3.016 s
[INFO] Finished at: 2017-02-18T00:33:16+05:30
[INFO] Final Memory: 9M/159M
[INFO]
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$
```

5) MVN install - run and create Jar file

```
MINGW64/d/Devops_lab/Maven_project/my_maven_project
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$ mvn install
[INFO] Scanning for projects...
[INFO]
[INFO] Building my_maven_project 1.0-SNAPSHOT
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ my_maven_project ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Devops_lab\Maven_project\my_maven_project\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ my_maven_project ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ my_maven_project ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Devops_lab\Maven_project\my_maven_project\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ my_maven_project ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ my_maven_project ---
[INFO] Surefire report directory: D:\Devops_lab\Maven_project\my_maven_project\target\surefire-reports

T E S T S
-----
Running com.cts.demo.AppTest
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.026 sec

Results :
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ my_maven_project ---
[INFO] Building jar: D:\Devops_lab\Maven_project\my_maven_project\target\my_maven_project-1.0-SNAPSHOT.jar
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ my_maven_project ---
[INFO] Installing D:\Devops_lab\Maven_project\my_maven_project\target\my_maven_project-1.0-SNAPSHOT.jar to C:\Users\vipul\.m2\repository\com\cts\my_maven_project\1.0-SNAPSHOT\my_maven_project-1.0-SNAPSHOT.jar
[INFO] Installing D:\Devops_lab\Maven_project\my_maven_project\pom.xml to C:\Users\vipul\.m2\repository\com\cts\my_maven_project\1.0-SNAPSHOT\my_maven_project-1.0-SNAPSHOT.pom
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 3.922 s
[INFO] Finished at: 2017-02-18T00:34:55+05:30
[INFO] Final Memory: 11M/159M
[INFO]
vipul@vipul MINGW64 /d/Devops_lab/Maven_project/my_maven_project
$
```