**Installation of tomcat server:**

* Open the link

<https://tomcat.apache.org/download-90.cgi>

* Select tomcat 9 with this link and download .exe file

[32-bit/64-bit Windows Service Installer](https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.86/bin/apache-tomcat-9.0.86.exe) ([pgp](https://downloads.apache.org/tomcat/tomcat-9/v9.0.86/bin/apache-tomcat-9.0.86.exe.asc), [sha512](https://downloads.apache.org/tomcat/tomcat-9/v9.0.86/bin/apache-tomcat-9.0.86.exe.sha512))

* Install tomcat with

Port number: 8080

Username: admin

Password: admin

* If at all any IDE exists in your machine, then change the port number to 8081.
* Set JAVA\_HOME=C:\Program Files\Java\jdk-21.0.2
* Set CLASSPATH=C:\Program Files\Apache Software Foundation\Tomcat 9.0\_TomcatV9\bin
* Set CATALINA\_HOME=C:\Program Files\Apache Software Foundation\Tomcat 9.0\_TomcatV9
* Open command prompt
* GO to location where you installed tomcat

>”cd C:\Program Files\Apache Software Foundation\Tomcat 9.0\_TomcatV9\bin”

* Now type “Catalina.bat start “in command prompt
* Tomcat server will starts
* You can check by typing localhost:8080 in the browser.

**NOTE: if you have already installed XAMP or any other server on same port, change the port number to 8082 while installation**

**Compilation and execution of Servlet Program:**

* Create the Servlet program HelloWorld.java in the following folder MyServlets
* **C:\Program Files\Apache Software Foundation\Tomcat 9.0\_TomcatV9\webapps\MyServlets\WEB-INF\classes**
* Open cmd and go to the above location
* Compile the program with the following statement

**javac -cp "C:\Program Files\Apache Software Foundation\Tomcat 9.0\_TomcatV9\lib\servlet-api.jar" HelloWorld.java**

* Class file will be created
* Write web.xml under this folder **C:\Program Files\Apache Software Foundation\Tomcat 9.0\_TomcatV9\webapps\DBconn\WEB-INF**
* Create the WAR file by using the following command

**C:\Program Files\Apache Software Foundation\Tomcat 9.0\_TomcatV9\webapps\MyServlets\WEB-INF\classes>jar cf Hello.war HelloWorld.class**

* **Write web.xml content under WEB-INF folder with <url-pattern> as /hello**
* **Go to** [**http://localhost:8082/manager/html**](http://localhost:8082/manager/html)
* **Select your Servlet folder**
* **Launch with the following url**

[**http://localhost:8082/MyServlets/hello**](http://localhost:8082/MyServlets/hello)

**How to create Database:**

* + Open Run SQL command line from start menu
  + Type sql>**connect system/123456**
  + Then type your DDL and DML commands
  + Write **context.xml** content under **META-INF** folder in your webapp folder
  + Add **ojdbc5.jar** file in **tomcatv9/lib** folder inorder to work with jdbc programs