JDBC CONNECTION

Video link - https://youtu.be/6DWGzrZ1I8k

XAMPP Server
1. Open browser (eg. Chrome) -> type localhost/dashboard
2. Click on myphpadmin
3. All the database on system will be displayed

Open Eclipse
1. In Ubuntu, Files-> Home -> jee-2023-03 -> Eclipse
2. Right click -> Open in terminal
3. Type ./eclipse

JDBC Project
1. File -> New -> Java Project

If Java Project is not shown, go to Others and Type 'Java Project'

2. Enter project name, **uncheck create module-info.java file** (This is an important step, otherwise it will show error)
3. Right side you will have project explorer (if project explorer is not visible, Above tab go to Window ->Show view -> Project Explorer)
4. Right click on Project name -> Build Path -> Configure build path
5. Under Java build path, got to libraries -> click on Modulepath -> Add external Jars -> Downloads - > choose my-sql-connector-java-5.1.34.bin.jar

If there is no jar file, go to http://172.1.14.200:81/clear_scripts

6. If there shows an unbound message under class path, click on it (JRE System Library (unbound)) and click on Remove

Then click on module path -> Add library -> JRE System Library - > Next & Finish

7. Then click on Apply and close
8. To add a file, right click on Porject name -> New -> Class -> Give package and class name -> Finish

Run the code
1. Right click on code/click on run button on top->Java application

2. Output will be on console

SERVLET CONNECTION

Video Link - https://youtu.be/h2tzYbl7i64

Add Tomcat (This step might already been done so check once)
1. Download the apache tomcat 10.1 from any link they give, or internet or it will be in downloads
2. File -> Other locations -> Ubuntu/Computer->opt folder
3. If opt folder does not open, got to terminal, type sudo chmod 777 /opt
4. Now open opt folder, create a folder named Tomcat. Then go to terminal (if folder does not have write permission), and type sudo chmod 777 /opt/Tomcat
5. Go to downloads, click on tomcat zip file -> extract -> put the path as tomcat folder -> extract all

Servlet Project
19. Open eclipse (refer previous steps)
20. File ->New -> Dynamic Web Project (search in otehrs if not there)
21. Enter Project name
22. Under Target runtime -> new runtime -> select Apache -> v 10.1 -> Browse -> choose the file we extracted in Tomcat folder
23. Under Dynamic Web Browser version -> choose 5.0 (never use 6.0)
24. Finish
25. Right click on Project name -> Build Path -> Configure build path
26. If there shows an unbound message under class path, click on it (JRE System Library (unbound)) and click on Remove
27. Then click on module path -> Add library -> JRE System Library - > Next & Finish
28. Under class path, Server Runtime Apache Tomcat should be there
29. Apply and close

Servlet Codes
1. Right click on Project name -> New -> HTML file (client part)
2. Enter filename -> finish

3. Right click on Project name -> New -> Servlet file (server part)
4. Enter package name and class name (Class name should be same as action attribute for form tag mentioned in html file) -> Finish

Run Codes
1. Window -> Web Browser -> Choose Chrome
2. Right click on html file -> Run As -> Run on server ->Apache 10.1 -> finish

Points to note:
1. Make sure you have mentioned all imports
2. For JDBC, know the url, user and password
3. Write the codes in PreparedStatements (preferably) for JDBC
4. Know the sql commands for creating database, creating table, insert values into table, remove values (delete), update values, display values (select)
5. We will have to write in datasheets to make sure you learn the codes properly
6. If the servlet program is not running again, go to server -> right lick on Tomcat 10.1 -> Restart (it should show started, synchornized)