"WDT-1Pr1"

"Demonstration of Installation of XAMPP server, MySQL Server and setting path, user and password."

- I] Installing XAMPP, MySQL Server, and configuring MySQL with paths, users, and passwords involves several steps.
- II] Below is a detailed demonstration of how to do this: -
 - A] Installing XAMPP: -
 - i] XAMPP is a package that includes Apache (a web server), MySQL (a database server), PHP, and more.
 - ii] You can download XAMPP from the official website:
 - https://www.apachefriends.org/index.html
 - iii] Follow these steps to install XAMPP: -
 - a] Download the appropriate XAMPP installer for your operating system (Windows, macOS, or Linux).
 - b] Run the installer and follow the on-screen instructions.
 - c] During the installation process, you can choose the components you want to install. Make sure that "MySQL Database" is selected.
 - d] Complete the installation.
 - B] Starting XAMPP and MySQL Server: -
 - *] Once XAMPP is installed, follow these steps to start XAMPP and the MySQL server :
 - a] Launch the XAMPP Control Panel.
 - b] On Windows, you can find it in the Start menu.
 - c] On macOS and Linux, you can start it from the terminal by running sudo /opt/lampp/manager-linux-x64.run.
 - d] Click the "Start" button next to "Apache" and "MySQL." This will start the Apache web server and MySQL server.
 - e] If everything is running successfully, you will see "Running" status next to both Apache and MySQL.
 - C] Accessing phpMyAdmin: -
 - i] XAMPP provides a web-based tool called phpMyAdmin for managing MySQL databases.
 - ii] To access it :
 - a] Open a web browser.
 - b] Enter the following URL: http://localhost/phpmyadmin/
 - c] You should see the phpMyAdmin login page.
 - D] Creating a MySQL User and Setting a Password :
 - i] By default, XAMPP MySQL installation has a root user with no password.

- ii] It's essential to set a password for the root user and create additional users for your databases.
 - iii] Here's how to do it using phpMyAdmin: -
 - a] Log in to phpMyAdmin with the default credentials (username: "root" and no password).
 - b] Click on the "User accounts" tab.
 - c] Click on "Edit privileges" for the "root" user.
 - d] In the "Change password" section, enter a new password for the root user and confirm it.
 - e] Scroll down and click the "Go" button to save the changes.
- E] Creating a New Database: -
 - *] Now, you can create a new database :
 - a] Click on the "Databases" tab.
 - b] Enter a name for your new database in the "Create database" field.
 - c] Choose a collation (usually the default is fine).
 - d] Click the "Create" button.
- F] Creating a New User and Granting Privileges: -
- *] It's a good practice to create a separate user for each database with the necessary privileges :
 - a] Click on the "User accounts" tab.
 - b] Click the "Add user account" button.
 - c] Enter a username and password for the new user.
 - d] Under "Global privileges," select "Check All" to grant all privileges.
 - e] Under "Database for user," select the database you created earlier.
 - f] Click the "Go" button to create the user and grant privileges.
- G] Setting Up MySQL Path (Optional): -
- i] If you want to use MySQL from the command line, you can set up the MySQL executable path.
 - ii] Follow these steps :
 - a] Locate the MySQL executable (mysql.exe).
 - b] It is usually located in the XAMPP installation directory under "mysql/bin" (e.g., "C:\xampp\mysql\bin" on Windows).
 - c] Add the MySQL binary directory to your system's PATH environment variable.
 - dl On Windows: -

Search for "Environment Variables" in the Start menu, click "Edit the system environment variables," click the "Environment Variables" button, and under "System variables," find "Path." Click "Edit," then "New," and add the path to the MySQL binary directory.

e] On Linux/macOS: -

Add the following line to your shell's profile configuration file (e.g., "/.bashrc" or "/.bash profile") : -

export PATH=\$PATH:/opt/lampp/mysql/bin # Replace with the actual path iii] After making these changes, open a new terminal window and test the MySQL command-line client by running mysql -u root -p.

iv] You will be prompted for the root password you set earlier.

III] That's it!

IV] You've successfully installed XAMPP, configured MySQL, set a password, and created a database and user.

V] You can now use MySQL for your web development projects.

*] Note: - While learning for ISEs or University exams, mix and match the answers according to your needs and try adding additional annotations, comments, highlights, etc., using pen/pencil. Carefully ignore those answers that seem out of syllabus (they are for referral only). Also, refer to (a) book(s) of your choice while reading from this material.