Database Testing using Selenium (Continued) - Java Database Connectivity (JDBC)

In this session, I will explain how to connect to Database from Java Programs. Follow the below steps:

- Install Database in our local machine and start it
  - Download XAMPP from here and install it - Click here to Download
  - Launch XAMPP and Start MySQL Relational Database Software which comes by default with XAMPP
- Open command prompt from C:/XAMPP/mysql/bin folder, connect to MySQL database system and trigger different SQL statements given below:
  - Connect to Database System using - **mysql -u root**
    - root is the default username of database
  - Close the command prompt and relaunch it from C:/XAMPP/mysql/bin folder
    - Provide a password to the Database System using - **mysqladmin.exe -u root password root**
    - Now connect to Database using - **mysql -u root -p**
      - When prompted for password type root and press Enter
  - View the default databases inside the MySQL using - **show databases;**
  - Create a new database in MySQL using - **create database qafox;**
    - Confirm its creation using **show databases;**
  - Pick the newly created database using - **use qafox;**
  - View the tables inside the qafox database using - **show tables;**
  - Create a new table using - **create table Employee(Name VARCHAR(50), Location VARCHAR(50), Experience INTEGER);**
    - Confirm its creation using **show tables;**
  - View the records inside the table using - **select * from Employee;**
    - Observe that you will see no records
  - Insert the new records into the table using:
    - **Insert into Employee values('Venkat','Hyderabad',10);**
    - **Insert into Employee values('Gopal','Bangalore',8);**
    - **Insert into Employee values('Niharika','Pune',3);**
    - Confirm new records insertion using **select * from Employee;**
- Executing the SQL statements from Java Programs using JDBC
  - Create a new Maven Project say 'JDBCDemo'
  - Add the dependency tags of mysql connect into the pom.xml file - https://mvnrepository.com/artifact/mysql/mysql-connector-java
  - Create a new Class say 'Demo' with main method inside it and write the code for connecting to qafox database using JDBC - View code here
  - Restructure the code using try catch blocks - View code here
  - Clear the deprecation message
  - Trigger prepared statements from Java programs - View code here
  - In real time, we may be creating a new user from the UI of the application using Selenium and retrieve the values of the newly created user from the database and compare whether the details are matching with DB.