

## Week-3-Assignment

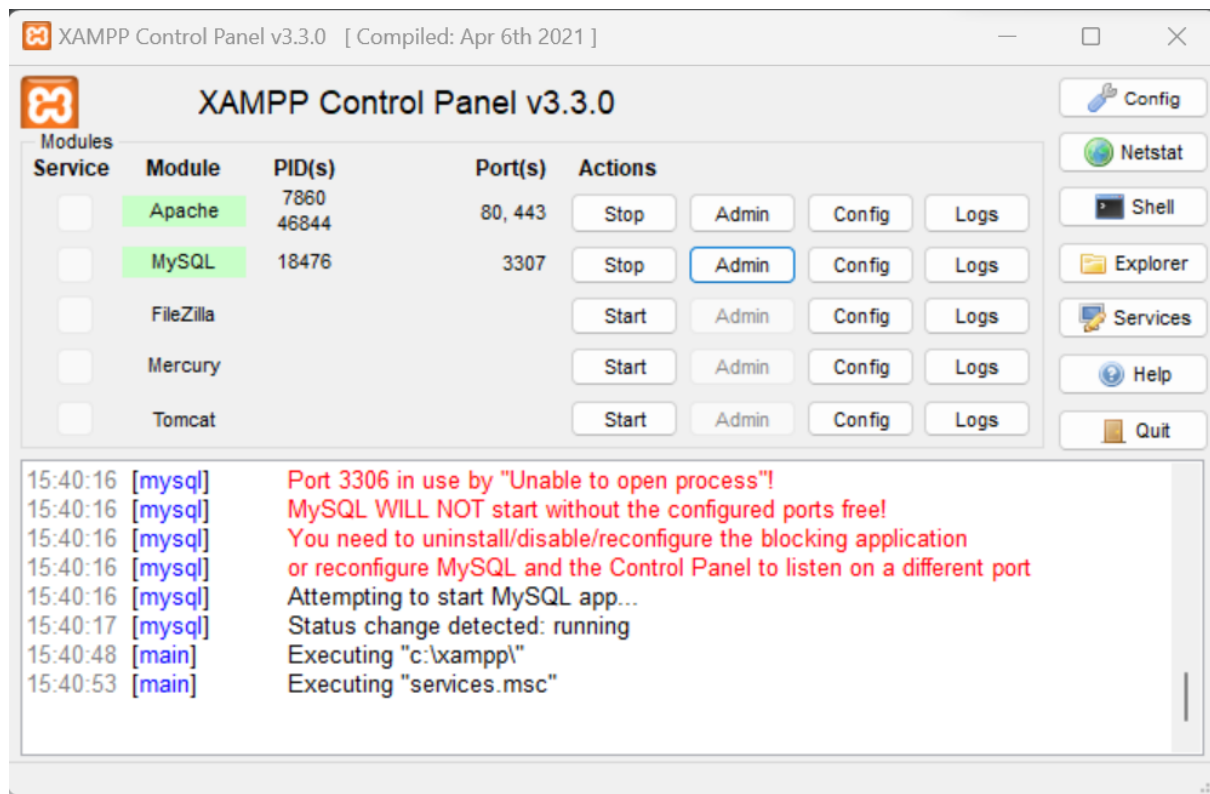
### Modern Application Development(Java Spring Boot)

Adhav M

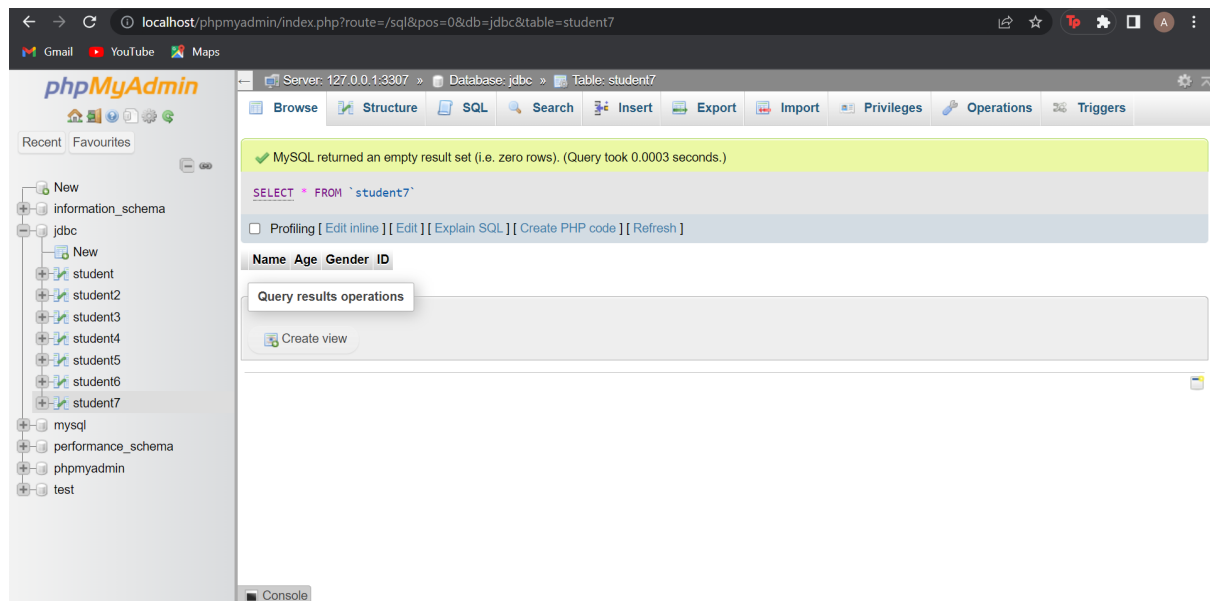
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#### 1. Implement JDBC connectivity using Java

##### Step 1 : Start XAMPP



# Create a table (student7) in phpmyAdmin



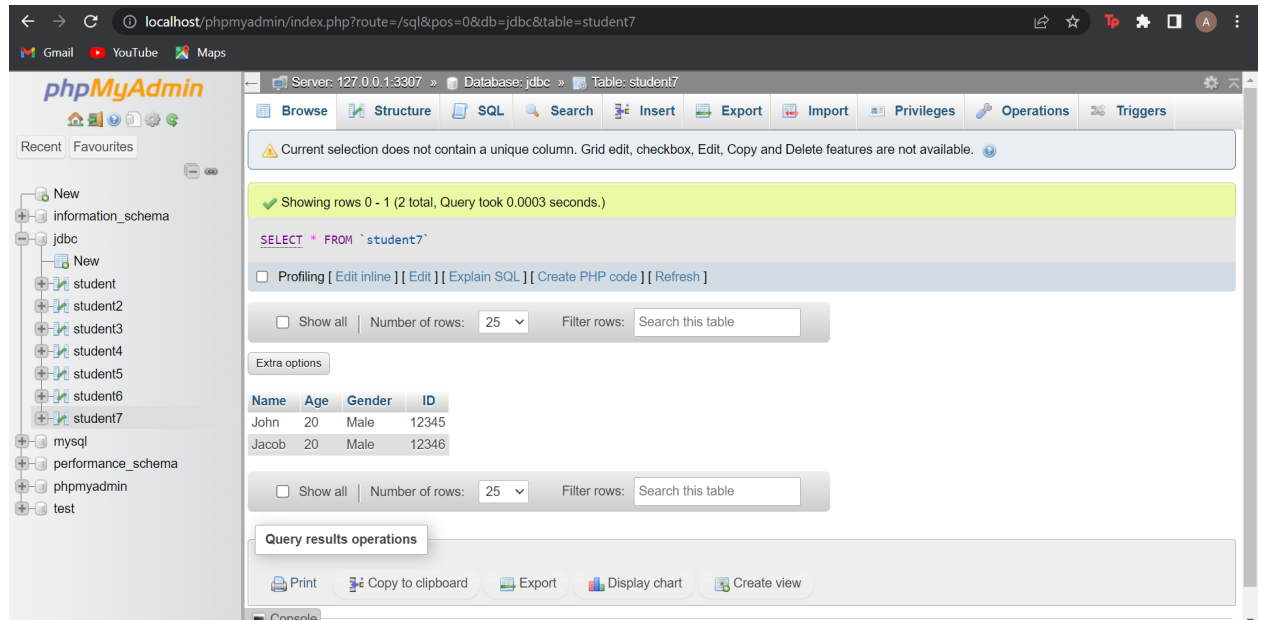
## 1. Insert:

### Code:

```
package kites;
import java.util.*;
import java.sql.*;
class Connect
{
    public static void main(String[] args) {
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection conn =
            DriverManager.getConnection("jdbc:mysql://127.0.0.1:3307/jdbc", "root", "");
            String sql = "INSERT INTO student7 (name, age, gender, id) VALUES (?, ?, ?, ?)";
            PreparedStatement statement = conn.prepareStatement(sql);
            statement.setString(1, "John");
            statement.setInt(2, 20);
            statement.setString(3, "Male");
            statement.setString(4, "12345");
            int rowsInserted = statement.executeUpdate();
            if (rowsInserted > 0) {
                System.out.println("A new student was inserted successfully.");
            } else {
                System.out.println("Failed to insert the student.");
            }
            statement.close();
            conn.close();
        } catch (ClassNotFoundException e) {
            System.out.println("MySQL JDBC driver not found.");
            e.printStackTrace();
        } catch (SQLException e) {
            System.out.println("Failed to connect to the database.");
        }
    }
}
```

```
e.printStackTrace();
}
}
}
```

## Output



The screenshot shows the phpMyAdmin interface for a database named 'jdbc'. The 'student7' table is selected, and the 'SQL' tab is active. The query results show 2 rows of data. The table structure is as follows:

Name	Age	Gender	ID
John	20	Male	12345
Jacob	20	Male	12346

Name	Age	Gender	ID
John	20	Male	12345
Jacob	20	Male	12346

## 2.Update

### Code:

```
package kites;
import java.util.*;
import java.sql.*;
class Connect
{
    public static void main(String[] args) {
        try {

            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection conn =
DriverManager.getConnection("jdbc:mysql://127.0.0.1:3307/jdbc", "root",
"");
        }
    }
}
```

```

String sql = "UPDATE student7 SET age = ? WHERE id = ?";
PreparedStatement statement = conn.prepareStatement(sql);
statement.setInt(1, 21);
statement.setString(2, "12345");
int rowsUpdated = statement.executeUpdate();
if (rowsUpdated > 0) {
    System.out.println("Age was updated successfully.");
} else {
    System.out.println("Failed to update the age.");
}
statement.close();
conn.close();
} catch (ClassNotFoundException e) {
    System.out.println("MySQL JDBC driver not found.");
    e.printStackTrace();
} catch (SQLException e) {
    System.out.println("Failed to connect to the database.");
    e.printStackTrace();
}
}
}

```

## Output

The screenshot shows the phpMyAdmin interface. The left sidebar displays the database structure, including 'information\_schema', 'jdbc', 'mysql', 'performance\_schema', 'phpmyadmin', and 'test'. The 'jdbc' database is selected, and the 'student7' table is highlighted. The main area shows the 'student7' table with two rows: John (Age 21, Gender Male, ID 12345) and Jacob (Age 20, Gender Male, ID 12346). The table is displayed in a grid view. The top toolbar includes options like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, and Triggers. The bottom toolbar includes options like Print, Copy to clipboard, Export, Display chart, and Create view.

Name	Age	Gender	ID
John	21	Male	12345
Jacob	20	Male	12346

### 3. Delete a row in a table

## Codes:

```
package kites;
import java.util.*;
import java.sql.*;
class Connect
{
    public static void main(String[] args) {
try {

Class.forName("com.mysql.cj.jdbc.Driver");
Connection conn =
DriverManager.getConnection("jdbc:mysql://127.0.0.1:3307/jdbc", "root",
"");
String sql = "DELETE FROM student7 WHERE id = ?";
PreparedStatement statement = conn.prepareStatement(sql);
statement.setString(1, "12345");
int rowsDeleted = statement.executeUpdate();
if (rowsDeleted > 0) {
System.out.println("Row was deleted successfully.");
} else {
System.out.println("Failed to delete the row.");
}
statement.close();
conn.close();
} catch (ClassNotFoundException e) {
System.out.println("MySQL JDBC driver not found.");
e.printStackTrace();
} catch (SQLException e) {
System.out.println("Failed to connect to the database.");
e.printStackTrace();
}
}
}
```

# Output

phpMyAdmin

Recent Favourites

New

information\_schema

jdbc

New

student

student2

student3

student4

student5

student6

student7

mysql

performance\_schema

phpmyadmin

test

Server: 127.0.0.1:3307 » Database: jdbc » Table: student7

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)

SELECT \* FROM `student7`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

Name	Age	Gender	ID
Jacob	20	Male	12346

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print

Copy to clipboard

Export

Display chart

Create view

Console

Name	Age	Gender	ID
Jacob	20	Male	12346