

MODERN APPLICATION DEVELOPMENT

JAVA SPRING BOOT

WEEKLY ASSIGNMET:3

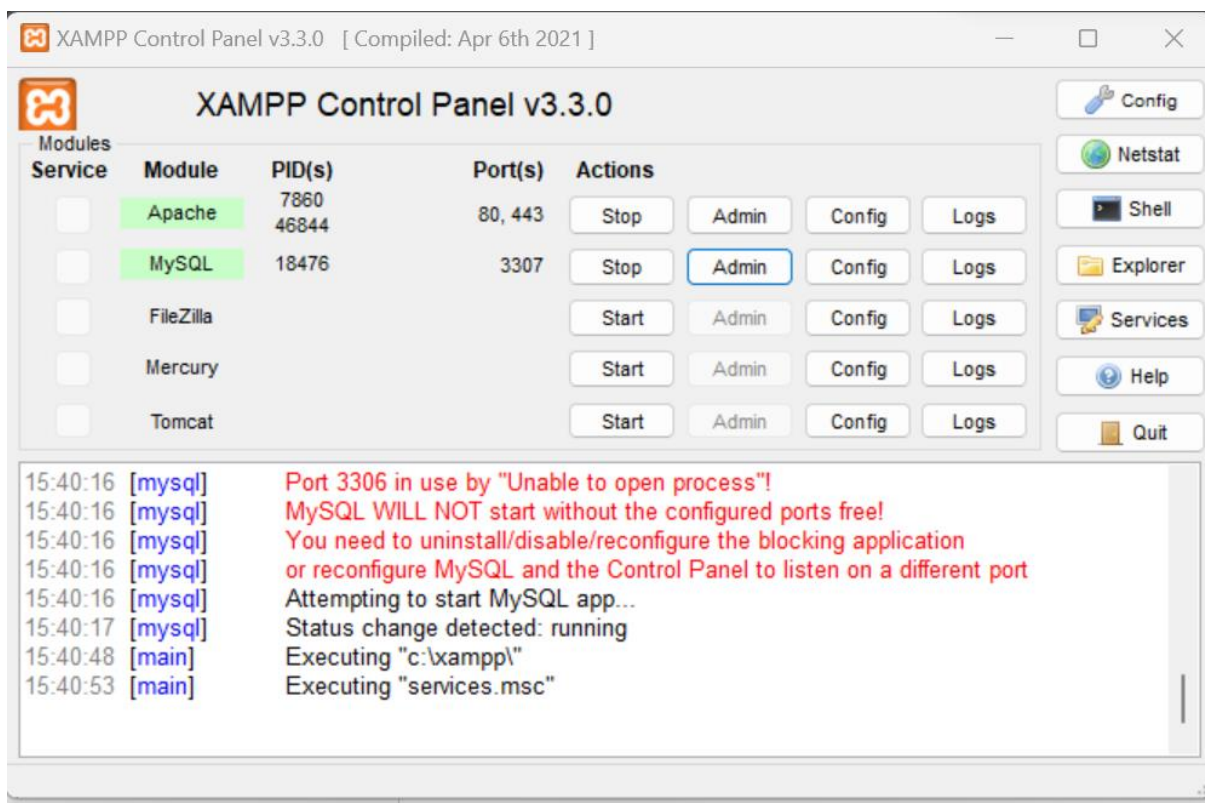
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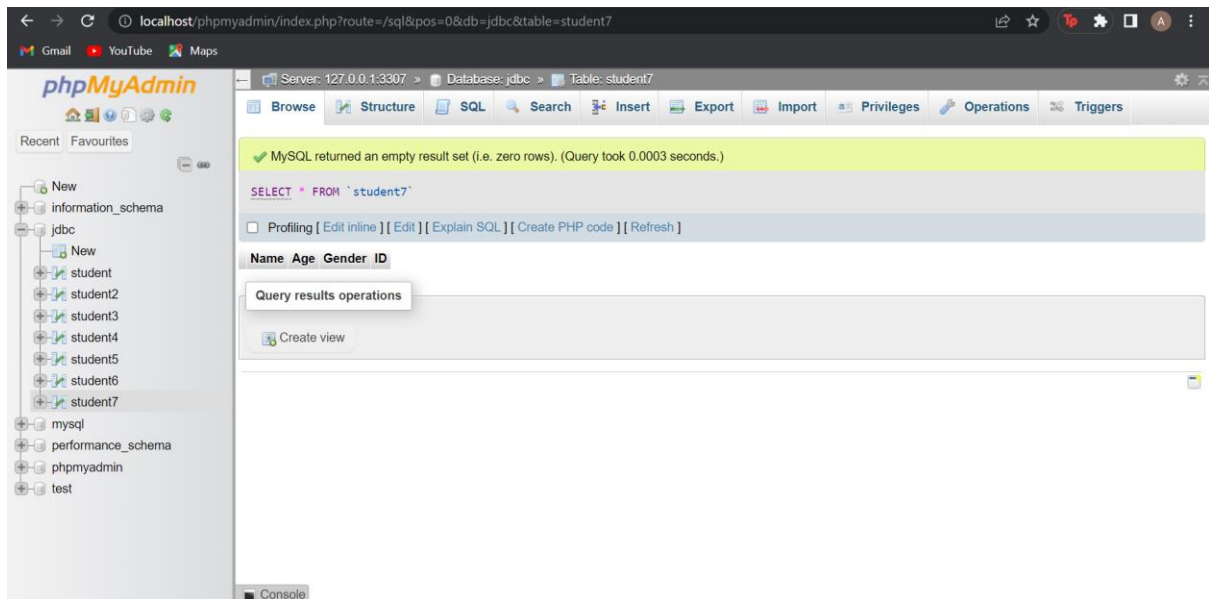
QUESTION:

IMPLEMENT JDBC CONNECTIVITY USING JAVA

1. Start XAMPP



Create a table in phpmyAdmin



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 web interface. The left sidebar displays the database structure with 'information_schema', 'jdbc', 'mysql', 'performance_schema', 'phpmyadmin', and 'test' visible. Under 'jdbc', there is a 'New' button and a list of tables: 'student', 'student2', 'student3', 'student4', 'student5', 'student6', and 'student7'. The 'student7' table is selected, and its structure is shown in the main panel. The table has columns: Name, Age, Gender, and ID. The data rows are: John (Age 20, Gender Male, ID 12345) and Jacob (Age 20, Gender Male, ID 12346). The interface also shows a 'Query results operations' section with buttons for Print, Copy to clipboard, Export, Display chart, and Create view.

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

Output:

| 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) {

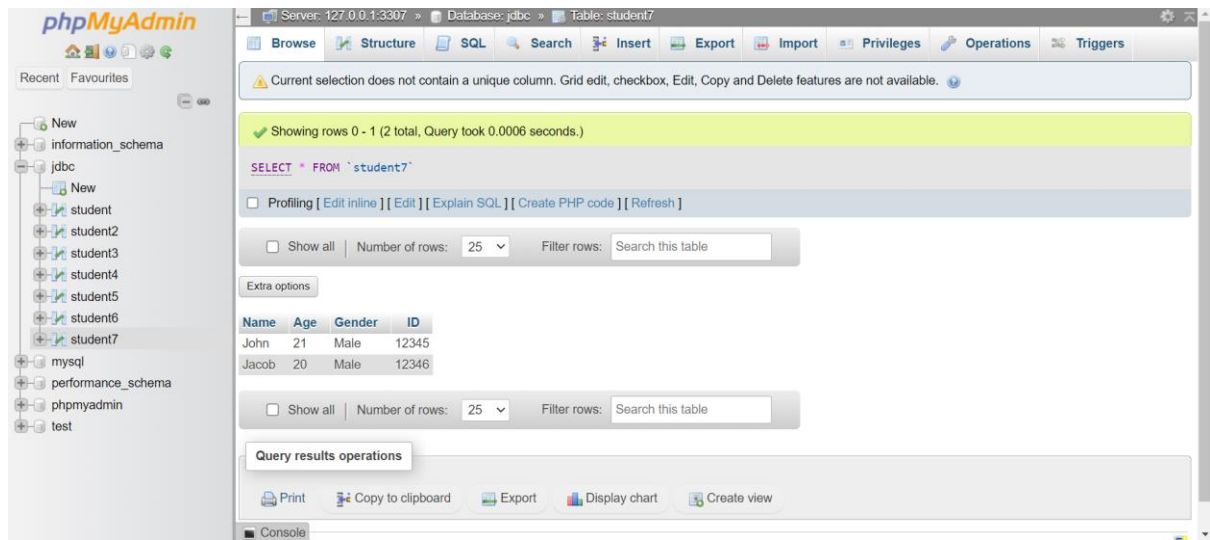
        System.out.println("Failed to connect to the database.");

        e.printStackTrace();

    }

}
}

```



Output :

| 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();  
}  
}  
}
```

phpMyAdmin

Recent Favourites

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:

Extra options

| Name | Age | Gender | ID |
|-------|-----|--------|-------|
| Jacob | 20 | Male | 12346 |

☐ Show all | Number of rows: 25 | Filter rows:

Query results operations

[Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Console

Output:

| Name | Age | Gender | ID |
|-------|-----|--------|-------|
| Jacob | 20 | Male | 12346 |
