

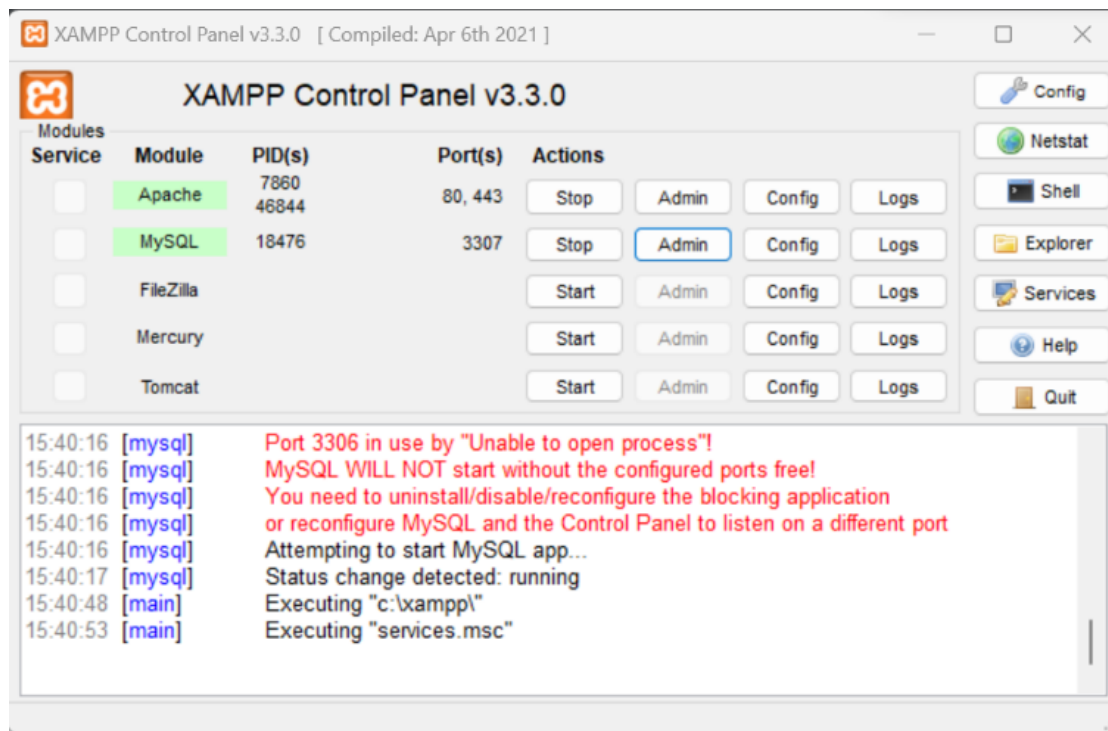
Modern Application Development (Java Spring Boot)

Assignment - Week - 3

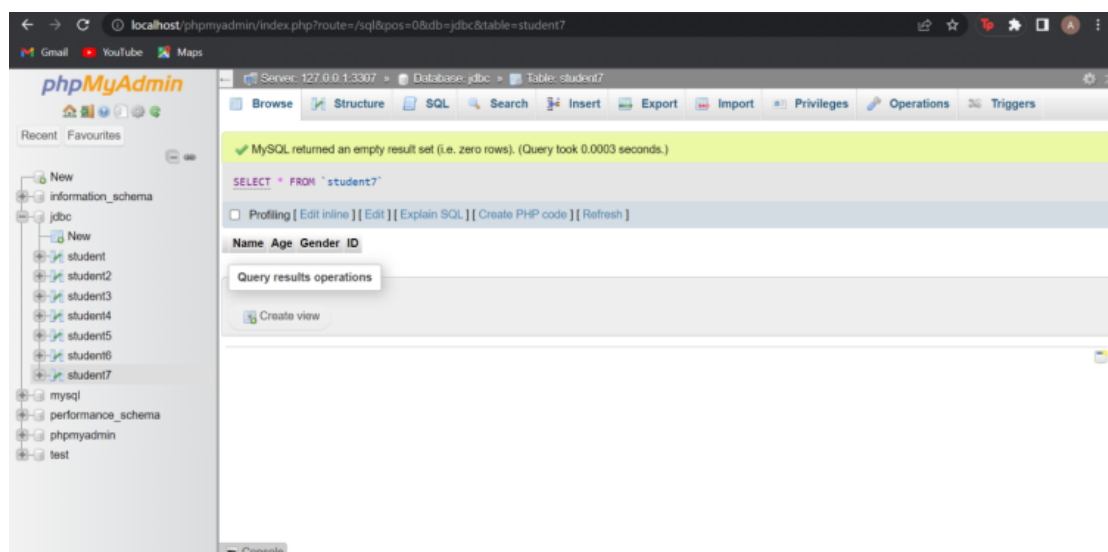
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1) Implement JDBC Connectivity using JAVA

Start XAMPP



Creating a table



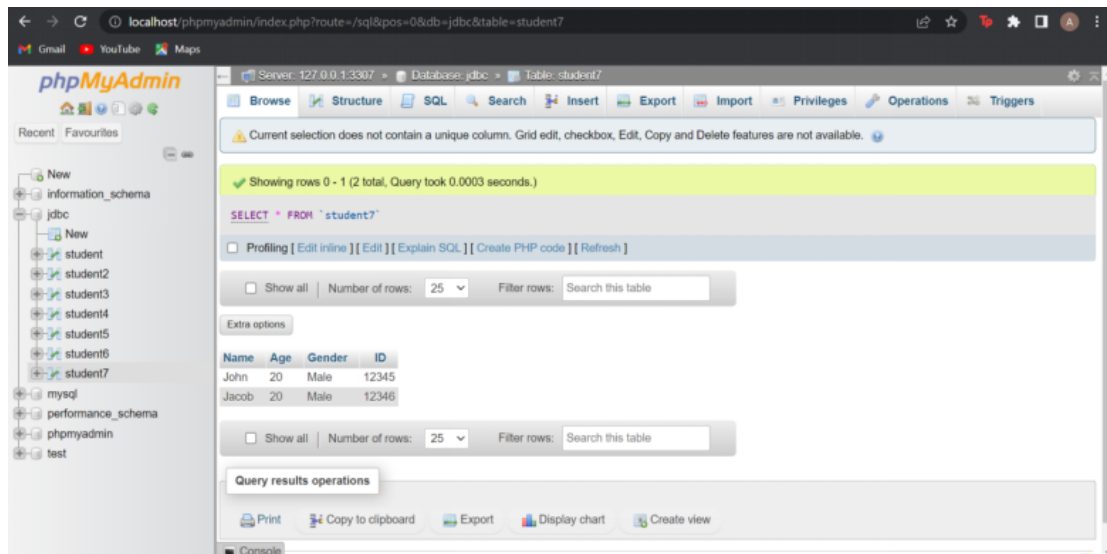
- I. Insert
Code:

```

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:



II.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", "");

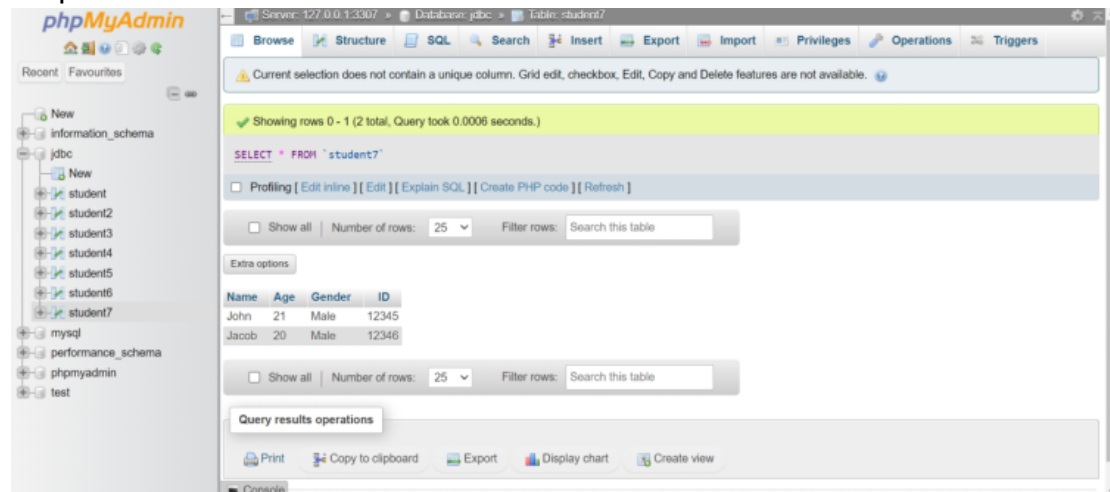
            String sql = "UPDATE student7 SET age = ? WHERE id = ?";
            PreparedStatement statement = conn.prepareStatement(sql);
            statement.setInt(1, 21);
            statement.setString(2, "12345");
            int rowsUpdated = statement.executeUpdate();
            if (rowsUpdated > 0) {
                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:



III.Delete

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 = "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:

The screenshot shows the phpMyAdmin web interface. The left sidebar displays a database structure with 'information_schema', 'jdbc', 'mysql', 'performance_schema', 'phpmyadmin', and 'test'. Under 'jdbc', there is a 'New' button and a list of tables: 'student', 'student2', 'student3', 'student4', 'student5', 'student6', and 'student7'. The main panel shows the 'Table: student7' view. A message at the top states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below this, a green bar indicates 'Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)'. The SQL query entered is 'SELECT * FROM `student7`'. Below the query, there are options for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. A 'Show all' button is present, along with a 'Number of rows' dropdown set to '25' and a 'Filter rows' search box. The 'Extra options' section shows a table with columns 'Name', 'Age', 'Gender', and 'ID'. The table contains one row: 'Jacob', '20', 'Male', '12346'. Below the table, there are 'Show all', 'Number of rows' (25), and 'Filter rows' (Search this table) options. At the bottom, the 'Query results operations' section includes buttons for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'. A 'Console' tab is visible at the very bottom.