Modern Application Development (Java Spring Boot)

Assignment-3

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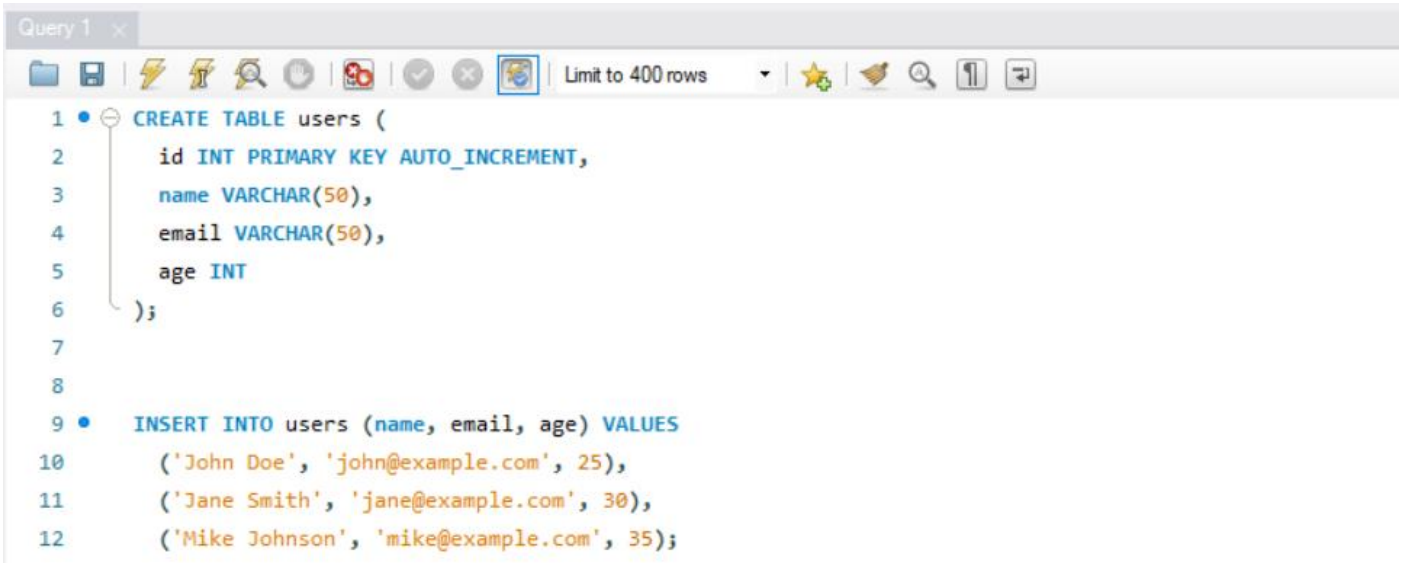
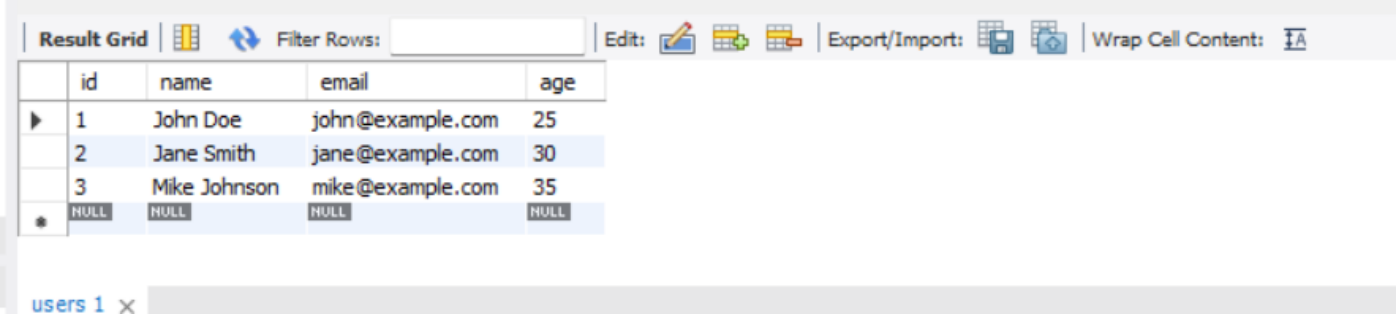
1) Implement JDBC connectivity using java.

Step 1: *Create a database in MySql for JDBC connectivity:*

```
CREATE TABLE users (
  id INT PRIMARY KEY AUTO_INCREMENT,
  name VARCHAR(50),
  email VARCHAR(50),
  age INT
);
INSERT INTO users (name, email, age) VALUES
  ('John Doe', 'john@example.com', 25),
  ('Jane Smith', 'jane@example.com', 30),
  ('Mike Johnson', 'mike@example.com', 35);
```





Step 2: *Establish JDBC connectivity using Netbeans IDE and execute some queries:*

```
package com.sample.jdbcex;
import java.sql.*;

public class NewClass {
    public static void main(String[] args) {
        // JDBC connection parameters
        String url = "jdbc:mysql://localhost:3306/users";
        String username = "root";
        String password = "aathirai";

        // Step 1: Establish the connection
        try (Connection conn = DriverManager.getConnection(url, username, password)) {
            System.out.println("Connected to the database.");

            // Step 2: Execute SQL queries
            Statement statement = conn.createStatement();

            // Insert a new user
            String insertQuery = "INSERT INTO users (name, age, email) VALUES ('John Doe', 25,
'john@example.com')";
            int rowsInserted = statement.executeUpdate(insertQuery);
            System.out.println(rowsInserted + " row(s) inserted.");

            // Select all users
            String selectQuery = "SELECT * FROM users";
```

```
            ResultSet resultSet = statement.executeQuery(selectQuery);
            while (resultSet.next()) {
                int userId = resultSet.getInt("id");
                String name = resultSet.getString("name");
                int age = resultSet.getInt("age");
                String email = resultSet.getString("email");
                System.out.println("User ID: " + userId + ", Name: " + name + ", Age: " + age + ", Email: " +
email);
            }

            // Update a user's age
            String updateQuery = "UPDATE users SET age = 30 WHERE name = 'John Doe'";
            int rowsUpdated = statement.executeUpdate(updateQuery);
            System.out.println(rowsUpdated + " row(s) updated.");

            // Delete a user
            String deleteQuery = "DELETE FROM users WHERE name = 'John Doe'";
            int rowsDeleted = statement.executeUpdate(deleteQuery);
            System.out.println(rowsDeleted + " row(s) deleted.");
        } catch (SQLException e) {
            System.out.println("Connection error: " + e.getMessage());
        }
    }
}
```

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Source | History

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Output:

20BCE2752

AATHIRAINATHAN P