

Task 13

1.Source code

```
import java.sql.*;

/*
 * Task 13: JDBC – MySQL Connectivity
 */

public class JdbcDemo {

    // DB credentials

    static final String URL = "jdbc:mysql://localhost:3306/internship_db";

    static final String USER = "root";

    static final String PASSWORD = "your_password";

    public static void main(String[] args) {

        Connection con = null;

        try {

            // 1. Load JDBC Driver

            Class.forName("com.mysql.cj.jdbc.Driver");

            // 2. Establish connection

            con = DriverManager.getConnection(URL, USER, PASSWORD);

            System.out.println("Database connected successfully.");
```

```

// ----- INSERT -----

String insertSQL = "INSERT INTO students(name, email, marks) VALUES (?, ?, ?)";

PreparedStatement psInsert = con.prepareStatement(insertSQL);

psInsert.setString(1, "Akshu");

psInsert.setString(2, "akshu@gmail.com");

psInsert.setInt(3, 90);

psInsert.executeUpdate();

System.out.println("Record inserted.");


// ----- READ -----

String selectSQL = "SELECT * FROM students";

PreparedStatement psSelect = con.prepareStatement(selectSQL);

ResultSet rs = psSelect.executeQuery();


System.out.println("\n--- Student Records ---");

while (rs.next()) {

    System.out.println(

        rs.getInt("id") + " | " +

        rs.getString("name") + " | " +

        rs.getString("email") + " | " +

        rs.getInt("marks")

    );

}


// ----- UPDATE -----

```

```

String updateSQL = "UPDATE students SET marks=? WHERE name=?";

PreparedStatement psUpdate = con.prepareStatement(updateSQL);

psUpdate.setInt(1, 95);

psUpdate.setString(2, "Akshu");

psUpdate.executeUpdate();

System.out.println("\nRecord updated.");


// ----- DELETE -----

String deleteSQL = "DELETE FROM students WHERE name=?";

PreparedStatement psDelete = con.prepareStatement(deleteSQL);

psDelete.setString(1, "Akshu");

psDelete.executeUpdate();

System.out.println("Record deleted.");

}

catch (ClassNotFoundException e) {

    System.out.println("JDBC Driver not found.");

}

catch (SQLException e) {

    System.out.println("Database error: " + e.getMessage());

}

finally {

    try {

        if (con != null) {

            con.close();


```

```
        System.out.println("Database connection closed.");
    }
} catch (SQLException e) {
    System.out.println("Error closing connection.");
}
}
}
}
```

2.Output

```
Database connected successfully.
Record inserted.

--- Student Records ---
1 | Akshu | akshu@gmail.com | 90

Record updated.
Record deleted.
Database connection closed.
```