# **Experiment 10**

**1.Write a java program for creating table and insert value in created table**

# **Program:**

import java.sql.\*;

// CreateTableAndInsert

public class Exp10\_1 {

    private static final String DB\_URL = "jdbc:mysql://localhost:3306/delivery\_db";

    private static final String DB\_USER = "root";

    private static final String DB\_PASSWORD = "Patil@123";

    public static void main(String[] args) {

        try (Connection con = DriverManager.getConnection(DB\_URL, DB\_USER, DB\_PASSWORD);

             Statement stmt = con.createStatement()) {

            // Creating a table

            String createTableSQL = "CREATE TABLE IF NOT EXISTS Customer (id INT AUTO\_INCREMENT PRIMARY KEY, name VARCHAR(255), email VARCHAR(255))";

            stmt.executeUpdate(createTableSQL);

            // Inserting values into the table

            String insertDataSQL = "INSERT INTO Customer (name, email) VALUES ('John Doe', 'john@example.com')";

            int rowsAffected = stmt.executeUpdate(insertDataSQL);

            if (rowsAffected > 0) {

                System.out.println("Data inserted successfully.");

            } else {

                System.out.println("Failed to insert data.");

            }

        } catch (SQLException e) {

            e.printStackTrace();

        }

    }

}

# **Output:**

Data inserted successfully.

**2. Write a java program to perform Alter, Update, and Delete operation on created table**.

# **Program:**

// AlterUpdateDelete

import java.sql.\*;

public class Exp10\_2 {

    private static final String DB\_URL = "jdbc:mysql://localhost:3306/delivery\_db";

    private static final String DB\_USER = "root";

    private static final String DB\_PASSWORD = "Patil@123";

    public static void main(String[] args) {

        try (Connection con = DriverManager.getConnection(DB\_URL, DB\_USER, DB\_PASSWORD);

             Statement stmt = con.createStatement()) {

            // Altering table - Adding a new column

            String alterTableSQL = "ALTER TABLE Customer ADD COLUMN phone VARCHAR(15)";

            stmt.executeUpdate(alterTableSQL);

            System.out.println("Table altered successfully.");

            // Updating data in the table

            String updateDataSQL = "UPDATE Customer SET phone = '1234567890' WHERE id = 1";

            int rowsAffected = stmt.executeUpdate(updateDataSQL);

            System.out.println(rowsAffected + " row(s) updated.");

            // Deleting data from the table

            String deleteDataSQL = "DELETE FROM Customer WHERE id = 1";

            rowsAffected = stmt.executeUpdate(deleteDataSQL);

            System.out.println(rowsAffected + " row(s) deleted.");

        } catch (SQLException e) {

            e.printStackTrace();

        }

    }

}

# **Output:**

Table altered successfully.

1 row(s) updated.

1 row(s) deleted.

**3. Write a java program to perform group by clause and display output.**

# **Program:**

// GroupByClause

import java.sql.\*;

public class Exp10\_3 {

    private static final String DB\_URL = "jdbc:mysql://localhost:3306/delivery\_db";

    private static final String DB\_USER = "root";

    private static final String DB\_PASSWORD = "Patil@123";

    public static void main(String[] args) {

        try (Connection con = DriverManager.getConnection(DB\_URL, DB\_USER, DB\_PASSWORD);

             Statement stmt = con.createStatement()) {

            String query = "SELECT COUNT(\*), State FROM Village\_Info GROUP BY State";

            ResultSet rs = stmt.executeQuery(query);

            // Displaying the result

            System.out.println("Count\tState");

            while (rs.next()) {

                int count = rs.getInt(1);

                String state = rs.getString(2);

                System.out.println(count + "\t" + state);

            }

        } catch (SQLException e) {

            e.printStackTrace();

        }

    }

}

# **Output:**

Count State

2 Maharashtra

1 Karnataka