**PRACTICAL NO.9**

* **Database Connectivity : [ALL Switch Case Operations]**

**package** Practical8;

**import** java.sql.\*;

**import** java.util.\*;

**public** **class** SwitchCaseOperation {

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner(System.***in***);

**try** {

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

Connection con = DriverManager.*getConnection*(

"jdbc:mysql://localhost:3306/demo\_a1", "root", "root");

Statement stm = con.createStatement();

String createTable = "CREATE TABLE IF NOT EXISTS product (pid INT PRIMARY KEY, pname VARCHAR(20), price INT)";

stm.executeUpdate(createTable);

**while** (**true**) {

System.***out***.println("\n Product Menu");

System.***out***.println("1. Add Product");

System.***out***.println("2. Update Product");

System.***out***.println("3. Delete Product");

System.***out***.println("4. Show All Products");

System.***out***.println("5. Exit");

System.***out***.print("Enter your choice: ");

**int** choice = sc.nextInt();

sc.nextLine();

**switch** (choice) {

**case** 1:

System.***out***.print("Enter product id: ");

**int** pidInsert = sc.nextInt();

sc.nextLine();

System.***out***.print("Enter product name: ");

String pnameInsert = sc.nextLine();

System.***out***.print("Enter product price: ");

**int** priceInsert = sc.nextInt();

String insertSQL = "INSERT INTO product VALUES(" + pidInsert + ", '" + pnameInsert + "', " + priceInsert + ")";

stm.executeUpdate(insertSQL);

System.***out***.println("Product added successfully.");

**break**;

**case** 2:

System.***out***.print("Enter id of product to update: ");

**int** pidUpdate = sc.nextInt();

sc.nextLine();

System.***out***.print("Enter new product name: ");

String pnameUpdate = sc.nextLine();

System.***out***.print("Enter new product price: ");

**int** priceUpdate = sc.nextInt();

String updateSQL = "UPDATE product SET pname='" + pnameUpdate + "', price=" + priceUpdate + " WHERE pid=" + pidUpdate;

stm.executeUpdate(updateSQL);

System.***out***.println("Product updated successfully.");

**break**;

**case** 3:

System.***out***.print("Enter id of product to delete: ");

**int** pidDelete = sc.nextInt();

String deleteSQL = "DELETE FROM product WHERE pid=" + pidDelete;

stm.executeUpdate(deleteSQL);

System.***out***.println("Product deleted successfully.");

**break**;

**case** 4:

ResultSet rs = stm.executeQuery("SELECT \* FROM product");

System.***out***.println("\nAll Products:");

**while** (rs.next()) {

System.***out***.println("Id: " + rs.getInt("pid") + ", Name: " + rs.getString("pname") + ", Price: " + rs.getInt("price"));

}

rs.close();

**break**;

**case** 5:

System.***out***.println("Exiting program. Bye!");

stm.close();

con.close();

sc.close();

System.*exit*(0);

**break**;

**default**:

System.***out***.println("Invalid choice! Please choose 1-5.");

}

}

} **catch** (Exception e) {

System.***out***.println("Error: " + e);

}

}

}

* **OUTPUT :**

Product Menu

1. Add Product

2. Update Product

3. Delete Product

4. Show All Products

5. Exit

Enter your choice: 1

Enter product id: 101

Enter product name: pen

Enter product price: 10

Product added successfully.

Product Menu

1. Add Product

2. Update Product

3. Delete Product

4. Show All Products

5. Exit

Enter your choice: 2

Enter id of product to update: 101

Enter new product name: pencil

Enter new product price: 20

Product updated successfully.

Product Menu

1. Add Product

2. Update Product

3. Delete Product

4. Show All Products

5. Exit

Enter your choice: 4

All Products:

Id: 101, Name: pencil, Price: 20

Product Menu

1. Add Product

2. Update Product

3. Delete Product

4. Show All Products

5. Exit

Enter your choice: 3

Enter id of product to delete: 101

Product deleted successfully.

Product Menu

1. Add Product

2. Update Product

3. Delete Product

4. Show All Products

5. Exit

Enter your choice: 5