Experiment – 03

Advance Java Lab (5CS4-24)

Class – B.Tech III Year, V Sem.

Objective:

3.1 - Write a Java program that makes a Connection with database using JDBC and prints metadata of this connection.

Code:

```
import java.sql.*;
class MysqlCon{
public static void main(String args[]){ try{ Class.forName("com.mysql.jdbc.Driver");
Connection con=DriverManager.getConnection( "jdbc:mysql://localhost:3306/db","root","root");
//here db is database name, root is username and password
Statement stmt=con.createStatement();
ResultSet rs=stmt.executeQuery("select * from emp");
while(rs.next())
System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getString(3));
con.close();
}
catch(Exception e){ System.out.println(e);}
}
}
```

Objective – 3.2 Include the database Connectivity in the program to insert, update, delete and display of information.

```
package com.devdaily.sqlprocessortests;

import java.sql.*;
public class BasicJDBCDemo
```

```
{
Connection conn;
public static void main(String[] args)
{
new BasicJDBCDemo();
}
public BasicJDBCDemo()
{
try{
Class.forName("com.mysql.jdbc.Driver").newInstance();
String url = "jdbc:mysql://localhost/coffeebreak";
conn = DriverManager.getConnection(url, "username", "password");
doTests();
conn.close();
}
catch (ClassNotFoundException ex) {
System.err.println(ex.getMessage());
} catch (IllegalAccessException ex) {
System.err.println(ex.getMessage());
} catch (InstantiationException ex) {
System.err.println(ex.getMessage());
} catch (SQLException ex){
System.err.println(ex.getMessage());
}
}
private void doTests()
```

```
{
doSelectTest();
doInsertTest();

doSelectTest();

doUpdateTest();

doSelectTest();

doDeleteTest();

doSelectTest();
}
private void doSelectTest()
{
System.out.println("[OUTPUT FROM SELECT]");
String query = "SELECT COF_NAME, PRICE FROM COFFEES";
try
{
Statement st = conn.createStatement();
ResultSet rs = st.executeQuery(query);
while (rs.next())
{
String s = rs.getString("COF_NAME");
float n = rs.getFloat("PRICE");
System.out.println(s + " " + n);
}
}
```

```
catch (SQLException ex)
{
System.err.println(ex.getMessage());
}}
private void doInsertTest()
{
System.out.print("\n[Performing INSERT] ... "); try
{
Statement st = conn.createStatement();
st.executeUpdate("INSERT INTO COFFEES " +
"VALUES ('BREAKFAST BLEND', 200, 7.99, 0, 0)");
}
catch (SQLException ex)
{
System.err.println(ex.getMessage());
}
}
private void doUpdateTest()
{
System.out.print("\n[Performing UPDATE] ... "); try
{
Statement st = conn.createStatement();
st.executeUpdate("UPDATE COFFEES SET PRICE=4.99 WHERE
COF_NAME='BREAKFAST BLEND'");
}
catch (SQLException ex){
System.err.println(ex.getMessage());}
```

```
}
private void doDeleteTest()
{
System.out.print("\n[Performing DELETE] ... "); try
{
Statement st = conn.createStatement();
st.executeUpdate("DELETE FROM COFFEES WHERE COF_NAME='BREAKFAST BLEND'");
}
catch (SQLException ex)
{
System.err.println(ex.getMessage());
}
}
```