## Program to display all the records from emp table.

```
package myPrac1;
import java.sql.*;
public class dbExample1 {
    public static void main(String[] args) {
         Connection conn = null;
         try {
             Class.forName("com.mysql.cj.jdbc.Driver");
             conn =DriverManager.getConnection(
    "jdbc:mysql://localhost:3306/classicmodels?useSSL=false",
                      "root", "password");
                  Statement stmt = conn.createStatement();
                 ResultSet result = stmt.executeQuery("select *
from emp");
                 System.out.println("-----
");
                 System.out.println("Empno\tEname\tDesgnation");
                  System.out.println("-----
");
                 while(result.next()) {
                      System.out.println(result.getInt(1) + "\t"
                               + result.getString(2) + "\t"
                               + result.getString(3));
                  conn.close();
         catch (Exception e) {
             System.out.println("Error :" + e.getMessage());
         }
    }
}
```

# Program to insert the record to underlying table.

```
create table empmast (empno int, fname varchar(30), lname
varchar(30), mobile varchar(10), email varchar(40), job
varchar(40), deptno int);
package myPrac1;
import java.sql.*;
public class dbExample2 {
    public static void main(String[] args) {
         Connection conn = null;
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              conn =DriverManager.getConnection(
    "jdbc:mysql://localhost:3306/classicmodels?useSSL=false",
                        "root", "password");
                   Statement stmt = conn.createStatement();
                   String SQL = "insert into empmast
values(102, 'Kalpesh', 'Shah', '9824098241', " +
                            "'kalpesh@aol.com','Programmer',10)";
                   int rowaffected = stmt.executeUpdate(SQL);
                   if(rowaffected > 0) {
                        System.out.println("Record inserted
successfully !");
                   else {
                        System.out.println("Error in insert !");
                   conn.close();
         catch (Exception e) {
              System.out.println("Error :" + e.getMessage());
         }
    }
}
```

# Program to update the record to underlying table

```
package myPrac1;
import java.sql.*;
public class dbExample3 {
    public static void main(String[] args) {
         Connection conn = null;
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              conn =DriverManager.getConnection(
    "jdbc:mysql://localhost:3306/classicmodels?useSSL=false",
                        "root", "password");
                   Statement stmt = conn.createStatement();
                   String SQL = "update empmast set mobile =
'9824098242'," +
                            "email = 'kalpeshp@aol.com' where empno
= 102";
                   int rowaffected = stmt.executeUpdate(SQL);
                   if(rowaffected > 0) {
                        System.out.println("Record updated
successfully !");
                   }
                   else {
                        System.out.println("Error in update !");
                   conn.close();
         catch (Exception e) {
              System.out.println("Error :" + e.getMessage());
         }
    }
}
```

# Program to delete the record to underlying table

```
package myPrac1;
import java.sql.*;
public class dbExample4 {
    public static void main(String[] args) {
         Connection conn = null;
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              conn =DriverManager.getConnection(
    "jdbc:mysql://localhost:3306/classicmodels?useSSL=false",
                        "root", "password");
                   Statement stmt = conn.createStatement();
                   String SQL = "delete from empmast where empno =
102";
                   int rowaffected = stmt.executeUpdate(SQL);
                   if(rowaffected > 0) {
                        System.out.println("Record deleted
successfully !");
                   else {
                        System.out.println("Error in delete
operation !");
                   conn.close();
         catch (Exception e) {
              System.out.println("Error :" + e.getMessage());
         }
    }
}
```

Program to get the input from user and perform the insert operation to underlying table.

```
package myPrac1;
import java.sql.*;
import java.util.Scanner;
public class dbExample5 {
    public static void main(String[] args) {
         int mEmpno,mDeptno;
         String mFname, mLname, mMobile, mEmail, mJob;
         Scanner scn = new Scanner(System.in);
         System.out.print("Enter the valid employee number :");
         mEmpno = scn.nextInt();
         System.out.print("Enter the valid employee fname
                                                            :");
         mFname = scn.next();
         System.out.print("Enter the valid employee lanme
                                                            :");
         mLname = scn.next();
         System.out.print("Enter the valid employee mobile :");
         mMobile = scn.next();
         System.out.print("Enter the valid employee email
                                                            :");
         mEmail = scn.next();
         System.out.print("Enter the valid employee job
                                                            :");
         mJob = scn.next();
         System.out.print("Enter the valid employee deptno :");
         mDeptno = scn.nextInt();
         Connection conn = null;
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              conn =DriverManager.getConnection(
    "jdbc:mysql://localhost:3306/classicmodels?useSSL=false".
                        "root", "password");
                   String SQL = "insert into empmast
values(?,?,?,?,?,?,?)";
                   PreparedStatement pstmt =
conn.prepareStatement(SQL);
                   //set the value to each parameter
                   pstmt.setInt(1, mEmpno);
```

```
pstmt.setString(2, mFname);
                   pstmt.setString(3, mLname);
                   pstmt.setString(4, mMobile);
                   pstmt.setString(5, mEmail);
                   pstmt.setString(6, mJob);
                   pstmt.setInt(7, mDeptno);
                   int rowaffected = pstmt.executeUpdate();
                   if(rowaffected > 0) {
                       System.out.println("Record inserted
successfully !");
                   else {
                       System.out.println("Error in insert !");
                   conn.close();
         catch (Exception e) {
              System.out.println("Error :" + e.getMessage());
         }
    }
}
```

## Program to display ResultSet Metadata.

```
package myPrac1;
import java.sql.*;
public class dbResultExample {
    public static void main(String[] args) {
         Connection conn = null;
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              String connectionUrl =
"jdbc:mysql://localhost:3306/classicmodels?useSSL=false";
              conn = DriverManager.getConnection(connectionUrl,
"root", "password");
              PreparedStatement pstmt =
conn.prepareStatement("select empno, ename, job, hiredate From
emp");
              ResultSet result = pstmt.executeQuery();
              ResultSetMetaData resmd = result.getMetaData();
              System.out.println("Total columns: " +
resmd.getColumnCount());
              System.out.println("Column Name of 1st column: " +
resmd.getColumnName(1));
              System.out.println("Column Type Name of 1st column: "
+ resmd.getColumnTypeName(1));
              conn.close();
         catch (Exception e) {
              System.out.println("Error :" + e.getMessage());
         }
    }
}
```

## Program to display Database Metadata.

```
package myPrac1;
import java.sql.*;
public class dbDatabaseMDExample {
    public static void main(String[] args) {
         Connection conn = null;
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              String connectionUrl =
"jdbc:mysql://localhost:3306/classicmodels?useSSL=false";
              conn = DriverManager.getConnection(connectionUrl,
"root", "password");
              DatabaseMetaData dbmd = conn.getMetaData();
              System.out.println("Driver Name
"+dbmd.getDriverName());
              System.out.println("Driver Version :
"+dbmd.getDriverVersion());
              System.out.println("UserName
"+dbmd.getUserName());
              System.out.println("DB Product Name:
"+dbmd.getDatabaseProductName());
              System.out.println("DB Product Version:
"+dbmd.getDatabaseProductVersion());
              conn.close();
         catch (Exception e) {
              System.out.println("Error :" + e.getMessage());
         }
    }
}
```

# Program to call a procedure from database and display the Resultset.

```
package myPrac1;
import java.sql.*;
//DELIMITER //
//CREATE PROCEDURE getEmployees(IN mdeptno INT)
//BEGIN
// select <a href="mailto:ename">ename</a>, job, e.deptno, <a href="mailto:dname">dname</a> from <a href="mailto:empno">emp</a> e join <a href="mailto:dept">dept</a>
d on e.deptno = d.deptno and
// e.deptno = mdeptno;
//END //
class Employees {
    public void getEmployees(int mdeptno) throws SQLException {
         DriverManager.registerDriver(new
com.mysql.cj.jdbc.Driver());
         String mysqlUrl =
"jdbc:mysql://localhost:3306/classicmodels?useSSL=false";
         boolean flag = false;
        try (Connection conn =
DriverManager.getConnection(mysqlUrl, "root", "password"))
        {
         //Calling a procedure with parameter
         CallableStatement cstmt = conn.prepareCall("{ call
getEmployees(?) }");
         //Set the parameter value
         cstmt.setInt(1, mdeptno);
         ResultSet rs = cstmt.executeQuery();
         System.out.println("Department Number :" + mdeptno);
         System.out.println("-----
 ----");
    System.out.println("Empno\tEname\tJob\t\tDeptno\tDepartment
Name");
         System.out.println("-----
-----");
         while(rs.next()) {
              System.out.println(rs.getInt(1) + "\t" +
                        rs.getString(2) + "\t" +
```

```
rs.getString(3) + "\t\t" +
                       rs.getString(4) + "\t" +
                        rs.getString(5) + "\t" );
              flag = true;
         if(!flag) System.out.println("There is no record exists
for deptno : " + mdeptno);
         } catch(Exception e) {
              System.out.println("Error :" + e.getMessage());
         }
    }
public class dbCallableExample {
    public static void main(String[] args) {
         try {
              Employees empobj = new Employees();
              empobj.getEmployees(40);
         catch (SQLException e) {
         System.out.println("Error :" + e.getMessage());
    }
}
```

## Program to do the batch processing to underlying table.

```
Create table tempstud (rollno int, name varchar(30));
package myPrac1;
import java.sql.*;
public class dbBatchProcessing1 {
    public static void main(String[] args) {
         try {
              DriverManager.registerDriver(new
com.mysql.cj.jdbc.Driver());
              String mysqlUrl =
"jdbc:mysql://localhost:3306/classicmodels?useSSL=false";
             Connection con = DriverManager.qetConnection(mysqlUrl,
"root", "password");
             Statement stmt = con.createStatement();
             //Need to set autocommit = false before batch
processing
             con.setAutoCommit(false);
    stmt.addBatch("insert into tempstud values(1, 'Mahesh Shah')");
    stmt.addBatch("insert into tempstud values(2, 'Dinesh Shah')");
    stmt.addBatch("insert into tempstud values(3,'Jayesh Shah')");
    stmt.addBatch("insert into tempstud values(4, 'Paresh Shah')");
    stmt.addBatch("insert into tempstud values(5,'Umesh Shah')");
    //Executing the batch
    int tot[] = stmt.executeBatch();
    //Saving the changes
    con.commit();
    System.out.println("Records inserted....:" + tot.length);
catch (Exception e) {
    System.out.println("Error :" + e.getMessage());
```

#### Program to do the batch processing to underlying table.

```
package myPrac1;
import java.sql.*;
public class dbBatchProcessing2 {
    public static void main(String[] args) {
         try {
              DriverManager.registerDriver(new
com.mysql.cj.jdbc.Driver());
              String mysqlUrl =
"idbc:mysql://localhost:3306/classicmodels?useSSL=false";
             Connection con = DriverManager.getConnection(mysqlUrl,
"root", "password");
             con.setAutoCommit(false);
             String SQL = "insert into tempstud values(?,?)";
             PreparedStatement pstmt = con.prepareStatement(SQL);
    //Record-1
pstmt.setInt(1, 1); pstmt.setString(2, "Mahesh"); pstmt.addBatch();
    //Record-2
pstmt.setInt(1, 2); pstmt.setString(2, "Paresh"); pstmt.addBatch();
    //Record-3
pstmt.setInt(1, 3); pstmt.setString(2, "Dinesh"); pstmt.addBatch();
    //Record-4
pstmt.setInt(1, 4); pstmt.setString(2, "Yogesh"); pstmt.addBatch();
    //Record-5
pstmt.setInt(1, 5); pstmt.setString(2, "Umesh"); pstmt.addBatch();
    //Executing the batch
    int tot[] = pstmt.executeBatch();
    //Saving the changes
    con.commit();
   System.out.println("Records inserted....:" + tot.length);
    con.close();
catch (Exception e) {
    System.out.println("Error :" + e.getMessage());
}
}
```

## Program to create updatable resultset.

```
create table tempemp (empid int primary key, ename varchar(30), salary
decimal(10,2));
insert into tempemp values(1, 'Kalpesh', 10000),
(2, 'Dinesh', 20000), (3, 'Mahesh', 30000), (4, 'Ganesh', 25000);
package myPrac1;
import java.sql.*;
public class UpdatableReExample {
    public static void main(String[] args) {
         try {
               DriverManager.registerDriver(new
com.mysql.cj.jdbc.Driver());
               String mysalUrl =
"jdbc:mysql://localhost:3306/classicmodels?useSSL=false";
               Connection con =
DriverManager.getConnection(mysqlUrl, "root", "password");
               System.out.println("Connection established.....");
               //Creating a Statement object
               Statement stmt =
con.createStatement(ResultSet.TYPE SCROLL INSENSITIVE,
               ResultSet. CONCUR UPDATABLE);
               //Retrieving the data
               ResultSet rs = stmt.executeQuery("select * from
tempemp");
               //Printing the contents of the table
               System.out.println("Contents of the table: ");
               rs.beforeFirst();
               while(rs.next()) {
                  System.out.print("EmpID : " +
rs.getInt("empid"));
                  System.out.print(", Name: " +
rs.getString("ename"));
                  System.out.println(", Salary: " +
rs.getString("salary"));
               System.out.println();
```

```
//Moving the pointer to the starting point in the
ResultSet
               rs.beforeFirst();
               //Updating the salary of each employee by 5000
               while(rs.next()) {
                  //Retrieve by column name
                  int newSal = rs.getInt("Salary") + 5000;
                  rs.updateInt("Salary", newSal );
                  rs.updateRow();
               System.out.println("Contents of the ResultSet after
increasing salaries");
               rs.beforeFirst();
               while(rs.next()) {
                  System.out.print("ID: " + rs.getInt("empid"));
                  System.out.print(", Name: " +
rs.getString("ename"));
                  System.out.println(", Salary: " +
rs.getString("salary"));
               System.out.println();
              catch(Exception ex) {
                   System.out.println(ex.getMessage());
              }
    }
```

#### **Program to create JDBCrowSet**

```
package myPrac1;
import javax.sql.rowset.*;
public class JBDCRowSetExample {
    public static void main(String[] args) {
         try {
             Class.forName("com.mysql.cj.jdbc.Driver");
              JdbcRowSet rowSet =
RowSetProvider.newFactory().createJdbcRowSet();
rowSet.setUrl("jdbc:mysql://localhost:3306/classicmodels?useSSL=fal
se");
            rowSet.setUsername("root");
            rowSet.setPassword("password");
            rowSet.setCommand("select * from tempemp");
            rowSet.execute();
            while (rowSet.next()) {
             System.out.println("-----
");
               System.out.println("EmpId : " + rowSet.getInt(1));
               System.out.println("Name
rowSet.getString(2));
               System.out.println("Salary : " + rowSet.getInt(3));
         }
         catch (Exception e) {
             System.out.println(e.getMessage());
         }
    }
}
```

## **Program to create CachedrowSet**

```
package myPrac1;
import javax.sql.rowset.RowSetProvider;
import javax.sql.rowset.CachedRowSet;
public class CachedRowSetExample {
    public static void main(String[] args) {
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              CachedRowSet crs =
RowSetProvider.newFactory().createCachedRowSet();
    crs.setUrl("jdbc:mysql://localhost:3306/classicmodels?useSSL=fa
lse");
              crs.setUsername("root");
              crs.setPassword("password");
              crs.setCommand("select * from tempemp");
              crs.execute();
              while (crs.next()) {
                  if (crs.getInt("empid") == 1) {
                      System.out.println("CRS found EmpID : 4 and
will remove the record.");
                      crs.deleteRow();
                      System.out.println("Remaining records are in
cached resultset");
                      while(crs.next()) {
                        System.out.println("EmpID : " +
crs.getInt(1) + "\n");
                      break;
                  }
              }
         catch (Exception e) {
              System.out.println(e.getMessage());
         }
    }
}
```

## **Program to create WebrowSet**

```
package myPrac1;
import java.io.FileOutputStream;
import javax.sql.rowset.RowSetProvider;
import javax.sql.rowset.WebRowSet;
public class dbWebrowSetExample {
    public static void main(String[] args) {
         try {
              Class.forName("com.mysql.cj.jdbc.Driver");
              WebRowSet wrs =
RowSetProvider.newFactory().createWebRowSet();
wrs.setUrl("jdbc:mysql://localhost:3306/classicmodels?useSSL=false"
);
             wrs.setUsername("root");
             wrs.setPassword("password");
            wrs.setCommand("select * from emp");
             wrs.execute();
             FileOutputStream fos = new FileOutputStream("emp.xml");
             wrs.writeXml(fos);
             System.out.println("XML file creation is done");
         catch (Exception e) {
              System.out.println(e.getMessage());
         }
    }
}
```

## **Program to create FilterRowSet**

```
package myPrac1;
import java.sql.SQLException;
import javax.sql.RowSet;
import javax.sql.rowset.*;
class searchfilter implements Predicate {
      int deptno;
      String colname;
      public searchfilter(String colname, int deptno) {
            this.colname = colname;
            this.deptno = deptno;
      @Override
      public boolean evaluate(RowSet rs) {
            boolean flag = false;
            try {
                  flag = rs.getInt(this.colname) == deptno ? true : false;
            catch(Exception ex) {
                  flag = false;
            return flag;
      }
      @Override
      public boolean evaluate(Object value, int column) throws SQLException {
            throw new UnsupportedOperationException("Not supported yet.");
      }
      @Override
      public boolean evaluate(Object value, String columnName) throws SQLException {
            throw new UnsupportedOperationException("Not supported yet.");
      }
public class dbFilterRowsetExample1 {
```

```
public static void main(String[] args) {
          try {
                Class.forName("com.mysql.cj.jdbc.Driver");
                FilteredRowSet rowSet =
RowSetProvider.newFactory().createFilteredRowSet();
         rowSet.setUrl("jdbc:mysql://localhost:3306/classicmodels?useSSL=false");
         rowSet.setUsername("root");
         rowSet.setPassword("password");
         rowSet.setCommand("select empno, ename, deptno from emp");
         rowSet.execute();
         rowSet.setFilter(new searchfilter("deptno", 10));
         while (rowSet.next()) {
       rowSet.getInt(3));
         }
          }
          catch (Exception e) {
                System.out.println(e.getMessage());
          }
     }
}
```

#### Program to create JoinRowSet

```
package myPrac1
import javax.sql.rowset.CachedRowSet;
import javax.sql.rowset.JoinRowSet;
import javax.sql.rowset.RowSetProvider;
public class dbJoinRowsetExample1 {
      public static void main(String[] args) {
            try {
                  Class.forName("com.mysql.cj.jdbc.Driver");
                  CachedRowSet emp =
RowSetProvider.newFactory().createCachedRowSet();
                  emp.setUrl("jdbc:mysql://localhost:3306/classicmodels?useSSL=false");
                  emp.setUsername("root");
                  emp.setPassword("password");
                  emp.setCommand("select * from emp");
                  emp.execute();
                  CachedRowSet dept =
RowSetProvider.newFactory().createCachedRowSet();
                  dept.setUrl("jdbc:mysql://localhost:3306/classicmodels?useSSL=false");
                  dept.setUsername("root");
                  dept.setPassword("password");
                  dept.setCommand("select * from dept");
                  dept.execute();
          JoinRowSet jrs = RowSetProvider.newFactory().createJoinRowSet();
          irs.addRowSet(emp, "deptno");
          irs.addRowSet(dept,"deptno");
          while (jrs.next()) {
        System.out.println(jrs.getInt("empno") + "\t" +
                  irs.getString("ename") + "\t" +
                  jrs.getString("deptno") + "\t" +
                  jrs.getString("dname"));
          }
            catch (Exception e) {
                  System.out.println(e.getMessage());
            }
}}
```

#### Program to create CRUD operation using JDBC

```
package myPrac1;
import java.sql.*;
import java.util.*;
/*CREATE TABLE crudstudent (
rollno int NOT NULL PRIMARY KEY,
name varchar(40), mobile varchar(10)
*/
class DAOHandler {
      private int mrollno;
      private String mname, mmobile;
      Scanner scn = new Scanner(System.in);
      private Connection getDBConnection() {
            Connection conn = null;
            try {
                  DriverManager.registerDriver(new com.mysql.cj.jdbc.Driver());
                  String mysqlUrl =
"jdbc:mysgl://localhost:3306/classicmodels?useSSL=false";
                  conn = DriverManager.getConnection(mysqlUrl, "root", "password");
            catch (Exception e) {
                  System. out. println("Connection Error:" + e.getMessage());
            return conn;
      private void getData() {
            System.out.print("Enter the valid rollno:");
            mrollno = scn.nextInt();
            System.out.print("Enter the valid name :");
            mname = scn.next();
            System.out.print("Enter the valid mobile:");
            mmobile = scn.next();
      private void getrollno() {
            System.out.print("Enter the valid rollno:");
            mrollno = scn.nextInt();
      }
```

```
public int addRecord() throws Exception {
      int result = 0;
      Connection conn = null;
      try {
            conn = getDBConnection();
            getData();
            String SQL = "insert into CRUDStudent values(?,?,?)";
            PreparedStatement pstmt = conn.prepareStatement(SQL);
            pstmt.setInt(1, mrollno);
            pstmt.setString(2, mname);
            pstmt.setString(3, mmobile);
            result = pstmt.executeUpdate();
      catch (Exception e) {
            System.out.println("Insert Error:" + e.getMessage());
      conn.close();
      return result;
public void editRecord() throws Exception {
      getrollno();
      Connection conn = null;
      PreparedStatement pstmt;
      boolean flag = false;
      try {
            conn = getDBConnection();
            pstmt = conn.prepareStatement(
                         "select * from CRUDStudent where rollno = ?");
            pstmt.setInt(1, mrollno);
            ResultSet result = pstmt.executeQuery();
            while(result.next()) {
                  flag= true;
                  System.out.println("Student Name: " + result.getString(2));
                  System.out.println("Student Mobile:" + result.getString(3));
            if(flag) {
                  System. out. println("Enter data to be update");
                  System.out.println("-----");
                  System. out. print ("Enter the valid name:");
                  mname = scn.next();
                  System.out.print("Enter the valid mobile:");
```

```
mmobile = scn.next();
                   pstmt = conn.prepareStatement
                    ("update crudStudent set name=?,mobile=? where rollno=?");
                   pstmt.setString(1, mname);
                   pstmt.setString(2, mmobile);
                   pstmt.setInt(3, mrollno);
                   pstmt.executeUpdate();
                   System.out.println("Record updated !");
            }
            else
            {
                   System. out. println ("Record not found, Try later!");
            }
      catch (Exception e) {
            System.out.println("Edit error:" + e.getMessage());
      }
public void deleteRecord() throws Exception {
      getrollno();
      Connection conn = null;
      PreparedStatement pstmt = null;
      boolean flag = false;
      try {
            conn = getDBConnection();
            pstmt = conn.prepareStatement(
                         "select * from CRUDStudent where rollno = ?");
            pstmt.setInt(1, mrollno);
            ResultSet result = pstmt.executeQuery();
            while(result.next()) {
                  flag= true;
                   pstmt = conn.prepareStatement(
                               "delete from CRUDStudent where rollno = ?");
                   pstmt.setInt(1, mrollno);
                   pstmt.executeUpdate();
                   System. out. println ("Record Deleted!");
            if(!flag)
                   System. out. println ("Record not found, Try later!");
      }
```

```
catch (Exception e) {
            System.out.println("Delete:" + e.getMessage());
      conn.close();
public void searchRecord() throws Exception{
      getrollno();
      Connection conn = null;
      boolean flag = false;
      try {
            conn = getDBConnection();
            PreparedStatement pstmt = conn.prepareStatement(
                         "select * from CRUDStudent where rollno = ?");
            pstmt.setInt(1, mrollno);
            ResultSet result = pstmt.executeQuery();
            while(result.next()) {
                  flag= true;
                  System.out.println("Student Name:" + result.getString(2));
                  System.out.println("Student Mobile:" + result.getString(3));
            if(!flag)
                  System. out. println("Record not found, Try later!");
      catch (Exception e) {
            System.out.println("Insert Error:" + e.getMessage());
      conn.close();
public void showAll() throws SQLException {
      Connection conn = null;
      try {
            conn = getDBConnection();
            PreparedStatement pstmt =
                         conn.prepareStatement("select * from CRUDStudent");
            ResultSet result = pstmt.executeQuery();
            System.out.println("Rollno\tStudent Name\tMobile");
            while(result.next()) {
                   System.out.println(result.getString(1) + "\t" +
                               result.getString(2) + "\t\t" + result.getString(3));
            }
      }
```

```
catch (Exception e) {
                   System.out.println(e.getMessage());
             conn.close();
      }
}
public class CRUDUsingJDBC {
      public static void main(String[] args) {
             int choice = 0;
             Scanner getch = new Scanner(System.in);
             DAOHandler crudobj = new DAOHandler();
             while(choice != 6) {
                   System.out.println("1 - Add Record");
                   System.out.println("2 - Edit Record");
                   System.out.println("3 - Delete Record");
                   System.out.println("4 - Search Record");
                   System. out. println("5 - View All Records");
                   System. out. println("6 - Exit");
                   System. out. print ("Enter the valid choice:");
                   choice = getch.nextInt();
                   switch (choice) {
                         case 1: {
                                try {
                                       int retval = crudobj.addRecord();
                                       if(retval > 0)
                                             System.out.println("Record inserted !");
                                       else
                                             System.out.println("Error in insert operation
!");
                                catch (Exception e) {
                                       System.out.println("Error:" + e.getMessage());
                                break;
                          }
                         case 2:
                                try {
                                       crudobj.editRecord();
                                }
```

```
catch (Exception e) {
                                      System.out.println("Edit :" + e.getMessage());
                                }
                                break;
                         case 3:
                                try {
                                      crudobj.deleteRecord();
                                }
                                catch (Exception e) {
                                      System.out.println("Delete :" + e.getMessage());
                                break;
                         case 4:
                                try {
                                      crudobj.searchRecord();
                                catch (Exception e) {
                                      System.out.println("Search :" + e.getMessage());
                                break;
                         case 5:
                                try {
                                      crudobj.showAll();
                                catch (Exception e) {
                                      System.out.println("Show All:" + e.getMessage());
                                break;
                         case 6:
                                System. out. println ("Thank you for using CRUD operation"
!");
                                return;
                         default:
                                System.out.println("Invalid choice !"); break;
                   }
            }
      }
}
```