SIMPLE STATEMENT

```
private static void createEmp() throws
import java.sql.*;
                                                     SQLException, ClassNotFoundException
import java.util.Scanner;
                                                                       ResultSet rs;
public class CRUDSS
                                                                       String insertQ = "INSERT INTO
                                                     emp VALUES ('e101','Minal','60000')";
        static Connection con;
        static int ch;
                                                                       //obtain a statement
        static String driverClassName =
                                                                       Statement stcreate =
"com.mysql.jdbc.Driver";
                                                     con.createStatement();
        static String url =
"jdbc:mysql://localhost:3300/emp";
                                                     stcreate.executeQuery(selectQ);
        static String selectQ = "SELECT * FROM
                                                                       System.out.println("Employee
emp";
                                                     table before Insertion");
        static String eid, ename, esalary;
                                                                       System.out.println("EmpId \t
        public static void main(String[] args)
                                                     Empname \t EmpSalary");
throws SQLException, ClassNotFoundException
                                                                       while(rs.next())
                                                                                eid = rs.getString(1);
                 Scanner sc = new
                                                                                ename =
Scanner(System.in);
                                                     rs.getString(2);
                 //load driver class
                                                                                esalary =
                                                     rs.getString(3);
        Class.forName(driverClassName);
                 //obtain a connection
                                                              System.out.println(eid +"\t"+ ename+
                 con =
                                                      "\t"+ esalary);
DriverManager.getConnection(url,"root","7284
559");
                                                                       int exeUpdate =
                                                     stcreate.executeUpdate(insertQ);
        while(true)
                                                                       if(exeUpdate == 1)
        System.out.println(" 1. create
                                                                                System.out.println("1
employee \n 2. update employee info \n 3.
                                                     row inserted");
delete employee \n 0. Exit \n enter your choice:
");
                                                                       rs =
                                                     stcreate.executeQuery(selectQ);
        ch = sc.nextInt();
                                                                       System.out.println("Employee
        switch (ch)
                                                     table after Insertion");
                                                                       System.out.println("EmpId \t
                 case 1:
                                                     Empname \t EmpSalary");
                 createEmp();
                                                                       while(rs.next())
                 break;
                 case 2:
                                                                                eid = rs.getString(1);
                 updateEmp();
                                                                                ename =
                 break;
                                                     rs.getString(2);
                 case 3:
                                                                                esalary =
                 deleteEmp();
                                                     rs.getString(3);
                 break;
                 case 0:
                                                              System.out.println(eid +"\t"+ ename+
                 System.exit(0);
                                                      "\t"+ esalary);
                 default:
                 System.out.println("Invalid
                                                                       stcreate.close();
choice! Please make a valid choice. \n\n");
                                                              private static void updateEmp() throws
        }
                                                     SQLException, ClassNotFoundException
```

```
{
                                                                      String deleteQ = "
                 ResultSet rs;
                                                             DELETE FROM emp WHERE id = 'e101'";
                 String updateQ = "UPDATE
emp SET salary= '70000' WHERE id = 'e101'";
                                                                      //obtain a statement
                                                                      Statement stdelete =
                 //obtain a statement
                                                     con.createStatement();
                 Statement stupdate =
                                                                      rs =
                                                     stdelete.executeQuery(selectQ);
con.createStatement();
                                                                      System.out.println("Employee
                 rs =
                                                     table before deletion");
stupdate.executeQuery(selectQ);
                 System.out.println("Employee
                                                                      System.out.println("EmpId \t
table before Updation");
                                                     Empname \t EmpSalary");
                 System.out.println("EmpId \t
                                                                      while(rs.next())
Empname \t EmpSalary");
                                                                               eid = rs.getString(1);
                 while(rs.next())
                 {
                                                                               ename =
                          eid = rs.getString(1);
                                                     rs.getString(2);
                          ename =
                                                                               esalary =
rs.getString(2);
                                                     rs.getString(3);
                          esalary =
rs.getString(3);
                                                             System.out.println(eid +"\t"+ ename+
                                                     "\t"+ esalary);
        System.out.println(eid +"\t"+ ename+
"\t"+ esalary);
                                                                      int exeUpdate1 =
                                                     stdelete.executeUpdate(deleteQ);
                 int exeUpdate1 =
                                                                      if(exeUpdate1 == 1)
stupdate.executeUpdate(updateQ);
                 if(exeUpdate1 == 1)
                                                             System.out.println("Employee is
                 {
                          System.out.println("1
                                                     deleted");
row updated");
                                                                      rs =
                                                     stdelete.executeQuery(selectQ);
                 rs =
stupdate.executeQuery(selectQ);
                                                                      System.out.println("Employee
                 System.out.println("Employee
                                                     table after deletion");
table after Updation");
                                                                      System.out.println("EmpId \t
                 System.out.println("EmpId \t
                                                     Empname \t EmpSalary");
Empname \t EmpSalary");
                                                                      while(rs.next())
                 while(rs.next())
                 {
                                                                               eid = rs.getString(1);
                          eid = rs.getString(1);
                                                                               ename =
                          ename =
                                                     rs.getString(2);
rs.getString(2);
                                                                               esalary =
                          esalary =
                                                     rs.getString(3);
rs.getString(3);
                                                             System.out.println(eid +"\t"+ ename+
                                                     "\t"+ esalary);
        System.out.println(eid +"\t"+ ename+
"\t"+ esalary);
                                                                      stdelete.close();
                 stupdate.close();
                                                             }
        private static void deleteEmp() throws
SQLException, ClassNotFoundException
                                                     OUTPUT:
        {
                 ResultSet rs;
```

F:\jdbc\mysql>java CRUDSS

```
1. create employee
                                                  PREPAREDSTATEMENT
2. update employee info
3. delete employee
                                                  import java.sql.*;
0. Exit
                                                  import java.util.Scanner;
enter your choice:
                                                  public class CRUDPS
Employee table before Insertion
Empld Empname
                      EmpSalary
                                                           static Connection con;
2
    dsd 90000
                                                           static int ch;
4
    sdf
          90000
                                                           static String driverClassName =
1 row inserted
                                                  "com.mysql.cj.jdbc.Driver";
Employee table after Insertion
                                                           static String url =
Empld Empname
                      EmpSalary
                                                  "jdbc:mysql://localhost:3300/emp";
    dsd 90000
                                                           static String selectQ = "SELECT * FROM
    sdf 90000
                                                  emp";
e101 Minal 60000
                                                           static String id, name, sal;
1. create employee
                                                           public static void main(String[] args)
2. update employee info
                                                  throws SQLException, ClassNotFoundException
3. delete employee
0. Exit
                                                                   CRUDPS crudps= new
enter your choice:
                                                  CRUDPS();//obj of class
Employee table before Updation
                                                                   Scanner sc = new
Empld Empname
                      EmpSalary
                                                  Scanner(System.in);
    dsd 90000
                                                                   //load driver class
    sdf 90000
e101 Minal 60000
                                                           Class.forName(driverClassName);
1 row updated
                                                                   //obtain a connection
Employee table after Updation
                                                                   con =
Empld Empname
                      EmpSalary
                                                  DriverManager.getConnection(url,"root","7284
    dsd 90000
2
                                                  559");
    sdf 90000
4
e101 Minal 70000
                                                           while(true)
1. create employee
2. update employee info
                                                           System.out.println("1. print employee
3. delete employee
                                                  table \n 2. create employee \n 3. update
0. Exit
                                                  employee info \n 4. delete employee \n 0. Exit
enter your choice:
                                                  \n enter your choice: ");
Employee table before deletion
                                                           ch = sc.nextInt();
Empld Empname
                      EmpSalary
                                                           switch (ch)
    dsd 90000
2
                                                           {
4
    sdf
          90000
                                                                   case 1:
e101 Minal 70000
                                                                   crudps.printEmp();
Employee is deleted
                                                                   break;
Employee table after deletion
                                                                   case 2:
Empld Empname
                      EmpSalary
                                                                   System.out.println("Enter Emp
    dsd 90000
2
                                                  Id: ");
4
    sdf 90000
                                                                   id = sc.next();
1. create employee
                                                                   System.out.println("\nEnter
2. update employee info
                                                  Name");
3. delete employee
                                                                   name = sc.next();
0. Exit
                                                                   System.out.println("\nEnter
enter your choice:
                                                  Salary");
0
                                                                   sal= sc.next();
```

```
crudps.createEmp(id, name,
                                                              void createEmp(String id, String
sal);
                                                     name, String sal) throws SQLException,
                                                     {\it ClassNotFoundException}
                 crudps.printEmp();
                 break;
                                                              {
                                                                       PreparedStatement createps;
                 case 3:
                 System.out.println("Enter Emp
                                                                       ResultSet rs:
Id: ");
                                                                       String createQ = "insert into
                 id = sc.next();
                                                     emp values(?,?,?)";
                 System.out.println("\nEnter
Name");
                                                              createps=con.prepareStatement(create
                 name = sc.next();
                                                     Q);
                 crudps.updateEmp(id, name);
                                                                      createps.setString(1,id);
                 crudps.printEmp();
                                                                       createps.setString(2,name);
                 break;
                                                                      createps.setString(3,sal);
                 case 4:
                 System.out.println("Enter Emp
                                                                      int
Id: ");
                                                     i=createps.executeUpdate();
                 id = sc.next();
                                                                      System.out.println(i+" records
                 crudps.deleteEmp(id);
                                                     inserted");
                 crudps.printEmp();
                                                                      createps.close();
                 break;
                                                              }
                 case 0:
                                                              void updateEmp(String id, String name)
                 System.exit(0);
                                                     throws SQLException, ClassNotFoundException
                 default:
                                                              {
                 System.out.println("Invalid
                                                                       PreparedStatement updateps;
choice! Please make a valid choice. \n\n");
                                                                       ResultSet rs;
                                                                       String updateQ = "update emp
                                                     set name = ? where id = ? ";
        }
                                                              updateps=con.prepareStatement(upda
}
        void printEmp() throws SQLException,
                                                     teQ);
ClassNotFoundException
                                                                       updateps.setString(1,name);
        {
                                                                       updateps.setString(2,id);
                 PreparedStatement printps;
                 ResultSet rs;
                                                                      int
                 String printQ = "select * from
                                                     i=updateps.executeUpdate();
emp";
                                                                      System.out.println(i+" records
                                                     updated");
        printps=con.prepareStatement(printQ);
                                                                      updateps.close();
                 rs = printps.executeQuery();
                                                              private static void deleteEmp(String id)
        System.out.println("\n\nPrinting Table:
                                                     throws SQLException, ClassNotFoundException
\n");
                                                              {
                 System.out.println("empID \t
                                                                       PreparedStatement deleteps;
empNAME \t empSALARY");
                                                                       ResultSet rs;
                 while(rs.next())
                                                                      String deleteQ = "delete from
                                                     emp where id=?";
                          id=rs.getString(1);
                          name=rs.getString(2);
                                                              deleteps=con.prepareStatement(delete
                          sal=rs.getString(3);
                                                     Q);
                                                                      deleteps.setString(1,id);
                          System.out.println(id
+"\t"+ name+ "\t"+ sal);
                                                                      int
                                                     i=deleteps.executeUpdate();
                 printps.close();
        }
                                                                      System.out.println(i+" records
                                                     deleted");
                                                                       deleteps.close();
```

```
}
                                          3. update employee info
}
                                          4. delete employee
                                          0. Exit
OUTPUT
                                          enter your choice:
                                          3
                                          Enter Emp Id:
F:\jdbc\mysql>javac CRUDPS.java
F:\jdbc\mysql>java CRUDPS
                                          Enter Name
1. print employee table
                                          dsd
2. create employee
                                          1 records updated
3. update employee info
4. delete employee
                                          Printing Table :
0. Exit
enter your choice:
                                          empID empNAME
                                                                 empSALARY
1
                                          2
                                              dsd
                                                    90000
                                          333
                                               fe
                                                     324
                                                    90000
Printing Table:
                                              sdf
                                          1. print employee table
empID empNAME
                       empSALARY
                                          2. create employee
2
    dd
          90000
                                          3. update employee info
4
     sdf
          90000
                                          4. delete employee
1. print employee table
                                          0. Exit
2. create employee
                                          enter your choice:
3. update employee info
                                          4
4. delete employee
                                          Enter Emp Id:
0. Exit
                                          333
enter your choice:
                                          1 records deleted
2
Enter Emp Id:
                                          Printing Table :
333
                                          empID empNAME
                                                                 empSALARY
Enter Name
                                          2
                                              dsd
                                                    90000
fe
                                              sdf 90000
                                          1. print employee table
Enter Salary
                                          2. create employee
324
                                          3. update employee info
1 records inserted
                                          4. delete employee
                                          0. Exit
Printing Table:
                                          enter your choice:
                                          0
empID empNAME
                       empSALARY
2
    dd
          90000
                                          COLLABLE STATEMENT
333
     fe
           324
     sdf
          90000
                                          import java.sql.*;
1. print employee table
```

2. create employee

import java.util.Scanner;

```
public class CollablePro
                                                     while (rs.next()) {
                                                     String id = rs.getString(1);
{
                                                     String name = rs.getString(2);
       static Connection con;
       static ResultSet rs;
                                                     String salary = rs.getString(3);
       static String id, name, salary;
                                                     System.out.println(id + "\t" +
                                             name + "\t" + salary);
       static String query1 ="{call
EMPprocedure()}";
       static String query2 = "{call
                                                     System.out.println("\n");
empinsert(?,?,?)}";
                                                     break;
                                                     case 2:
       static String query3 = "{call
empupdate(?,?)}";
                                                     //insert procedure
       static String query4 = "{call
                                                     csst = con.prepareCall(query2);
                                                     System.out.println("Enter
empdelete(?)}";
       static String query5 = "{call
                                             Employee id");
emppOUT(?)}";
                                                     id = sc.next();
       static String query6 = "{call
                                                     csst.setString(1,id);
emppINOUT(?,?)}";
                                                     System.out.println("Enter
                                             Employee name");
       public static void main(String
                                                     name = sc.next();
agrs[]) throws Exception
                                                     csst.setString(2,name);
                                                     System.out.println("Enter
       Scanner sc = new
                                             Employee salary");
Scanner(System.in);
                                                     salary = sc.next();
                                                     csst.setString(3,salary);
       Class.forName("com.mysql.cj.jd
                                                     csst.execute();
bc.Driver");
       con =
                                                     System.out.println("\n");
DriverManager.getConnection("jdbc:my
                                                     break;
sql://localhost:3300/emp", "root",
                                                     case 3:
"7284559");
                                                     //update procedure
                                                     csst = con.prepareCall(query3);
       System.out.println("1.select\n2.i
                                                     System.out.println("Enter
nsert\n3.update\n4.delete\n5.OUT
                                             Employee id");
Procedure\n6.INOUT Procedure\nEnter
                                                     id = sc.next();
your choice: ");
                                                     csst.setString(1,id);
       int ch = sc.nextInt();
                                                     System.out.println("Enter
       switch(ch){
                                             Employee salary");
       case 1:
                                                     salary = sc.next();
       //select procedure
                                                     csst.setString(2,salary);
       CallableStatement csst =
                                                     csst.execute();
con.prepareCall(query1);
       System.out.println("Employee
                                                     break;
table");
                                                     case 4:
       csst.execute();
                                                     //delete procedure
       rs = csst.getResultSet();
                                                     csst = con.prepareCall(query4);
       System.out.println("ID\tNAME\t
                                                     System.out.println("Enter
SALARY");
                                             Employee id");
```

id = sc.next();	F:\jdbc\mysql>java CollablePro
csst.setString(1,id);	1.select
csst.execute();	2.insert
	3.update
break;	4.delete
case 5:	5.OUT Procedure
//out procedure	6.INOUT Procedure
<pre>csst = con.prepareCall(query5);</pre>	Enter your choice:
csst.registerOutParameter(1,Typ	2
es.INTEGER);	Enter Employee id
System.out.println("Executing	4
Out procedure");	Enter Employee name
csst.execute();	sdf
System.out.println("Total count	Enter Employee salary
of employess in company whos	600000
SALARY > 80000 : " + csst.getInt(1));	
System.out.println("\n");	F:\jdbc\mysql>java CollablePro
break;	1.select
case 6:	2.insert
//INOUT procedure	3.update
<pre>csst = con.prepareCall(query6);</pre>	4.delete
System.out.println("Enter	5.OUT Procedure
Employee salary");	6.INOUT Procedure
salary = sc.next();	Enter your choice:
<pre>csst.setString(2,salary);</pre>	1
csst.registerOutParameter(1,Typ	Employee table
es.INTEGER);	ID NAME SALARY
System.out.println("Executing	4 sdf 600000
INOUT procedure");	
csst.execute();	F:\jdbc\mysql>java CollablePro
System.out.println("Count of	1.select
Employee "+csst.getInt(1)+" whos salary	2.insert
is greater than: " + salary);	3.update
System.out.println("\n");	4.delete
break;	5.OUT Procedure
default:	6.INOUT Procedure
System.out.println("Enter valid	Enter your choice:
option");	3
}	Enter Employee id
	4
	Enter Employee salary
}	90000
}	
	F:\jdbc\mysql>java CollablePro
OUTPUT:	1.select
	2.insert
	3.update

```
4.delete
```

5.OUT Procedure

6.INOUT Procedure

Enter your choice:

5

Executing Out procedure

Total count of employess in company

whos SALARY > 80000: 2

F:\jdbc\mysql>java CollablePro

1.select

2.insert

3.update

4.delete

5.OUT Procedure

6.INOUT Procedure

Enter your choice:

6

Enter Employee salary

80000

Executing INOUT procedure

Id of Employee 2 whos salary is greater

than: 80000

F:\jdbc\mysql>java CollablePro

1.select

2.insert

3.update

4.delete

5.OUT Procedure

6.INOUT Procedure

Enter your choice:

1

Employee table

ID NAME SALARY

2 dd 90000

4 sdf 90000