19BIT0292
BHAUMIK TANDAN
Digital Assignment –3
JAVA PROGRAMMING

1.University grading system maintains a database called "GradeProcessing" that contains number of tables to store, retrieve and manipulate student marks. 'Java2' is one of the tables which contains following attributes for all the students enrolled in "Java2": "ID", "Name", "Quiz", "A1", "A2", "Exam", "CumulativeMark" and "Grade". A sample of the table may look like as follows:

ID	Name	Quiz	A1	A2	Exam	CumulativeMark	Grade
11111111	X	100	85	100	88	90.55	HD
22222222	Y	100	60	80	75	75.00	DI

Write a JAVA Graphical User Interface (GUI) program that would perform following tasks:

🕐 Create Table: Create a table that is capable to store above information.

🕐 Insert Record: If the user of your program wants to insert a record, your program should ask for all the fields of the record and insert them in the table.

🕐 Search: The user of your program should be able to search a particular record by ID or any other field.

🕐 Update: The user of your program should be able to update any field/s of a particular record. The record for update operation will be selected by ID.

🕐 Calculate Results: The Cumulative Mark of a student would be calculated using the following formula: CumulativeMark = (Quiz * 0.05)+(A1* 0.15) +(A2* 0.2) + (Exam * 0.6)

🕐 Calculate Grade:

HD: CumulativeMark>=85

DI: 75<=CumulativeMark<85

CR: 65<=CumulativeMark<75 PS: 50<=CumulativeMark<65 FL: CumulativeMark<50

Note that, ID must be 8-digit number, A1, A2, and Exam marks must be between 0 and 100 (inclusive), and CumulativeMark must be floating-point numbers with two decimal places.

CODE

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package javafxapplication5;


import static java.lang.Math.round;
import java.sql.*;
import javafx.application.Application;
```

```
import javafx.event.*;
import javafx.geometry.Pos;
import javafx.scene.*;
import javafx.scene.control.*;
import javafx.scene.layout.VBox;
import javafx.stage.Stage;

/**
 *
 * @author bhaum
 */
public class JavaFXApplication5 extends Application {
           Connection  con=null;
           Statement st=null;
           String query;
           Stage p;
           Scene in,mi,up,ii,upi,ij,ijin;
           String gr(double u)
           {
            if(u>=85)
                return "HD";
            if(u>=75)
                return "DI";
            if(u>=65)
                return "CR";
            if(u>=50)
```

```
     return "PS";
return "FL";
}
double cal(int a,int b,int c,int d)
{
    return round((a*0.05+b*0.15+c*0.2+d*0.6)*100)/100.0;
}
void ij()
{
    Label l= new Label("ENTER THE ID TO BE UPDATED");
    Label ls= new Label("SELECT FIELD TO BE UPDATED");
    Label lp= new Label();
    VBox v= new VBox();
    ComboBox comboBox = new ComboBox();
    comboBox.getItems().add("ID");
    comboBox.getItems().add("NAME");
    comboBox.getItems().add("QUIZ");
    comboBox.getItems().add("A1");
    comboBox.getItems().add("A2");
    comboBox.getItems().add("EXAM");
    TextField ti=new TextField();
    Button bu= new Button("UPDATE");
    Button bunt= new Button("Go Back");
    v.getChildren().addAll(l,ti,lp,ls,comboBox,bu,bunt);
    v.setAlignment(Pos.CENTER);
    bunt.setOnAction(f->{
```

```
            p.setScene(mi);
            });
              bu.setOnAction(e->{
              try
              {
                   ResultSet rs=st.executeQuery("select * from
Java2 where id='"+ti.getText()+"'");
                   rs.next();
                  String uid=rs.getString(1);
               }
              catch(Exception nm)
              {
                  lp.setText("Record does not exsists");
                  return;
              }
              String a=""+comboBox.getValue();
              VBox vin= new VBox();
              TextField tin=new TextField();
               Button buntin= new Button("Go Back");
                   Button buin= new Button("UPDATE");
                    buntin.setOnAction(ekjdfd->{p.setScene(ij);});
                   Label linp= new Label();
                   Label lin=new Label();
                   switch(a)
                       {
                         case "NAME":
                         case "ID":
```

```
                            lin.setText("ENTER THE NEW "+a);
                           break;
                          case "QUIZ":
                          case "A1":
                          case "A2":
                          case "EXAM":
                              lin.setText("ENTER THE NEW MARKS");
                              linp.setText("NOTE: CumulativeMark and
grade will be updated automatically");
                             break;
                    }

vin.getChildren().addAll(lin,tin,linp,buin,buntin);
                    vin.setAlignment(Pos.CENTER);
                    ijin=new Scene(vin,340,150);
                    p.setScene(ijin);
                    buin.setOnAction(ekfd->
                    {
                        query="update Java2 set
"+a+"='"+tin.getText()+"' where id='"+ti.getText()+"'";
                        try
                        {
                            st.executeUpdate(query);
                            linp.setText("UPDATED");
                            String s=ti.getText();
                            if(a=="ID")
                            s=tin.getText();
                            ResultSet rs=st.executeQuery("select *
```

```
from Java2 where id='"+s+"'");
                            rs.next();
                            double
jk=cal(Integer.parseInt(rs.getString(3)),Integer.parseInt(rs.getStri
ng(4))
                                ,Integer.parseInt(rs.getString(5)),I
nteger.parseInt(rs.getString(6)));
                            st.executeUpdate("update Java2 set
Cumulative_Mark"
                                 +"="+jk+" where id='"+s+"'");
                            st.executeUpdate("update Java2 set
grade"
                                 +"='"+gr(jk)+"' where id='"+s+"'");
                        }
                        catch(Exception elk)
                        {
                            linp.setText("INVALID INPUT");
                        }
                       });
                   });
               ij= new Scene(v,170,190);
           }
           void iu()
           {
               Label l= new Label("ENTER THE ID TO BE SEARCHED");
               Label lp= new Label();
               VBox v= new VBox();
               TextField ti=new TextField();
```

```
  Button bu= new Button("SEARCH");
  Button bunt= new Button("Go Back");
  v.getChildren().addAll(l,ti,lp,bu,bunt);
  v.setAlignment(Pos.CENTER);
  bunt.setOnAction(f->{
p.setScene(mi);
});
  bu.setOnAction(e->{
  try
  {
       VBox vi= new VBox();
       Button but= new Button("Go Back");
       but.setOnAction(mbn->{
p.setScene(upi);
});
            ResultSet rs=st.executeQuery("select * from Java2
where id='"+ti.getText()+"'");
            rs.next();
            Label lu= new Label(
                    "ID: "+rs.getString(1)+
                     "\nNAME: "+rs.getString(2)+
                     "\nQUIZ MARKS: "+rs.getInt(3)+
                     "\nA1 MARKS: "+rs.getInt(4)+
                     "\nA2 MARKS: "+rs.getInt(5)+
                     "\nEXAM MARKS: "+rs.getInt(6)+
                     "\nCUMULATIVE MARKS: "+rs.getDouble(7)+
                     "\nGRADE: "+rs.getString(8)+"\n\n");
```

```
                    vi.getChildren().addAll(lu,but);
                    vi.setAlignment(Pos.CENTER);
                     up=new Scene(vi,170,180);
                     p.setScene(up);
        }
        catch(Exception nm)
        {
            lp.setText("Record does not exsists");
        }});
        upi= new Scene(v,170,150);
    }
    void ii()
    {
        Label l= new Label("ENTER THE DATA");
        Label lp= new Label();
        VBox v= new VBox();
        Button bu= new Button("Submit");
        Label li= new Label("\nENTER THE ID");
        TextField ti=new TextField();
        Label ln= new Label("ENTER THE NAME");
        TextField tn=new TextField();
        Label lq= new Label("ENTER THE QUIZ MARKS");
        TextField tq=new TextField();
        Label l1= new Label("ENTER THE A1 MARKS");
        TextField t1=new TextField();
        Label l2= new Label("ENTER THE A2 MARKS");
```

```
                TextField t2=new TextField();
                Label le= new Label("ENTER THE EXAM MARKS");
                TextField te=new TextField();
                Button bunt= new Button("Go Back");
                 bunt.setOnAction(f->{
              p.setScene(mi);
              });

v.getChildren().addAll(l,li,ti,ln,tn,lq,tq,l1,t1,l2,t2,le,te,lp,bu,b
unt);
                v.setAlignment(Pos.CENTER);
                ii= new Scene(v,300,370);
                bu.setOnAction(e ->{
                try
                 {
                     double
m=cal(Integer.parseInt(tq.getText()),Integer.parseInt(t1.getText())
                     ,Integer.parseInt(t2.getText()),Integer.parseInt
(te.getText()));
                     String g=gr(m);
                 query="insert into java2 values"
             +"('"+ti.getText()+"','"+tn.getText()
+"',"+Integer.parseInt(tq.getText())
             +","+Integer.parseInt(t1.getText())
+","+Integer.parseInt(t2.getText())
              +","+Integer.parseInt(te.getText())+","+m+",'"+g+"')";
                 lp.setText("CumulativeMark: "+m+"\nGrade: "+g);
                 st.execute(query);
                 }
```

```
                catch(Exception p)
                {
                    lp.setText("Invalid input");
                }});
            }
            void mii()
            {
                Label l= new Label("Which operation do you want to
perform");
                Label lp= new Label();
                VBox v= new VBox();
                Button bu= new Button("Submit");
                RadioButton u,s,i;
                u=new RadioButton("Insert Record");
                s= new RadioButton("Update Record");
                i= new RadioButton("Search Record");
                ToggleGroup q= new ToggleGroup();
                u.setToggleGroup(q);
                s.setToggleGroup(q);
                i.setToggleGroup(q);
                bu.setOnAction(e ->
                  {
                     if (u.isSelected())
                         {
                            p.setScene(ii);
                          }
                     else if (s.isSelected())
```

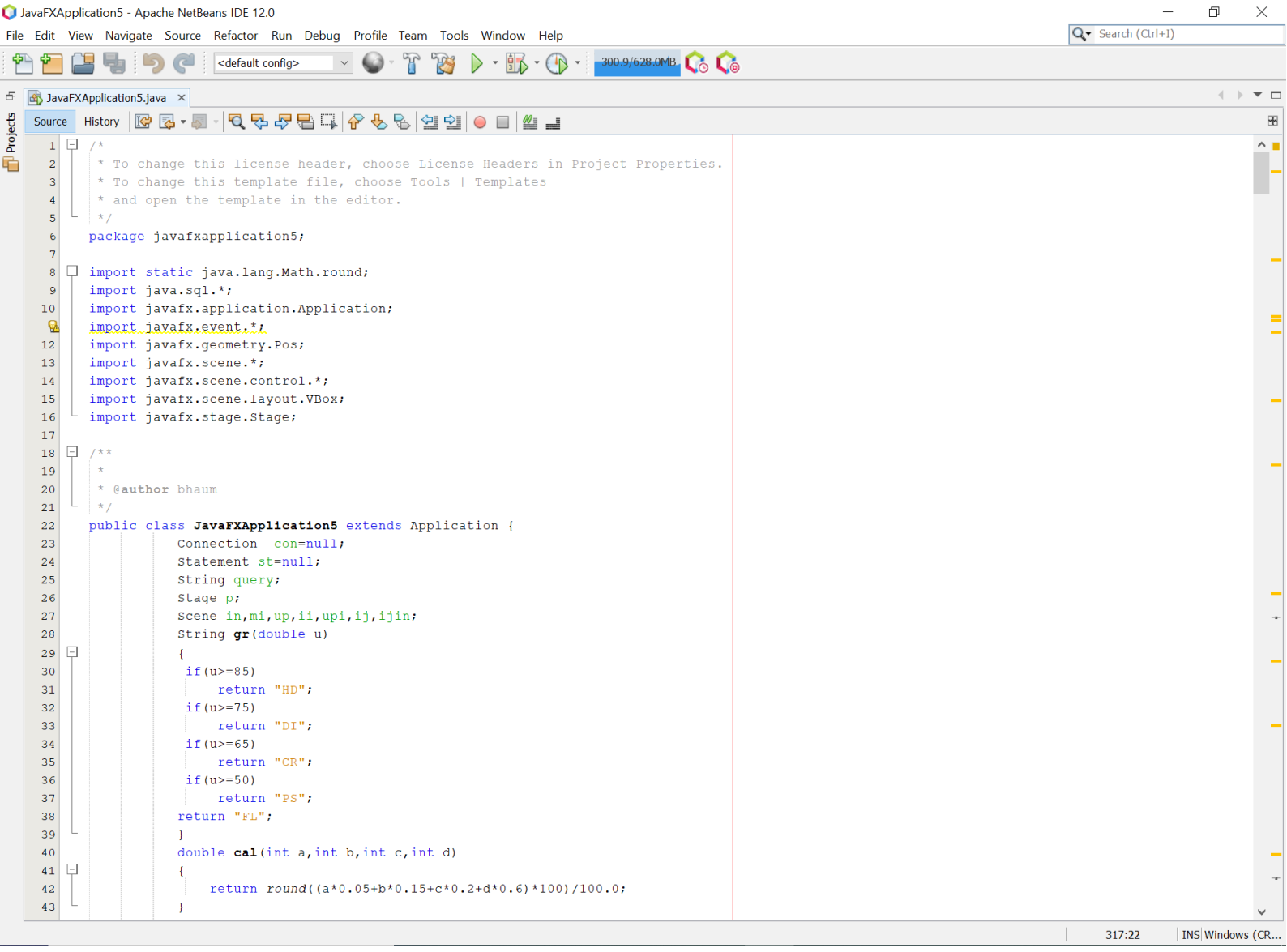
```
                    {
                      p.setScene(ij);
                     }
                  else if (i.isSelected())
                     {
                      p.setScene(upi);
                     }
               });
            v.getChildren().addAll(l,u,s,i,bu,lp);
            v.setAlignment(Pos.CENTER);
            mi= new Scene(v, 250, 180);
             p.setScene(mi);
          }
       void ct() throws SQLException
       {
           st=con.createStatement();
       query = "CREATE TABLE Java2("
 + "id varchar(8) PRIMARY KEY,"
 + "name varchar2(20),"
 + "quiz int,"
 + "a1 int,"
 + "a2 int,"
 + "exam int,"
 + "cumulative_mark number(5,2),"
 +"grade varchar2(2),"
+ "check(length(id)=8 and "
```

```
+ "a1>=0 and a1<=100 and a2>=0 and a2<=100 and "
+ "exam>=0 and exam<=100))";
  st.execute(query);
   query="insert into java2 values"
        +"('11111111','X',100,85,100,88,90.55,'HD')";
  st.execute(query);
  query="insert into java2 values"
        +"('22222222','Y',100,60,80,75,75.00,'DI')";
  st.execute(query);
       }
      @Override
public void start(Stage primaryStage) {
    primaryStage.setTitle("19BIT0292");
    p=primaryStage;
    Label l=new Label("Login Id");
     TextField t1=new TextField();
    Label l1=new Label("Password");
     PasswordField t2= new PasswordField();
     Button b1=new Button("Submit");
    Label lp=new Label();
    VBox r=new VBox();
    r.getChildren().add(l);
    r.getChildren().add(t1);
    r.getChildren().add(l1);
    r.getChildren().add(t2);
    r.getChildren().add(b1);
```

```
        r.getChildren().add(lp);
        r.setAlignment(Pos.CENTER);
        b1.setOnAction(e->{

     try{

con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1525:bh
aumik",t1.getText(),t2.getText());
          ct();
          ii();
          iu();
          ij();
          mii();
         }
     catch(Exception ek)
     {
         lp.setText("Wrong ID or Password");
     }
     }
 );

        in=new Scene(r,150,120);
        p.setScene(in);
         p.show();
       }

    /**
     * @param args the command line arguments
```

```
     */
    public static void main(String[] args) {
        launch(args);
    }

}
```

SCREENSHOT OF CODE

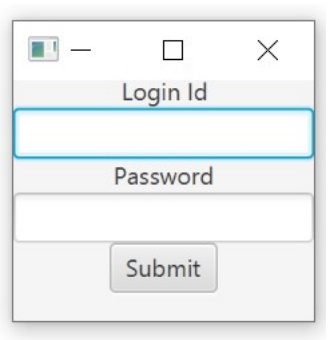


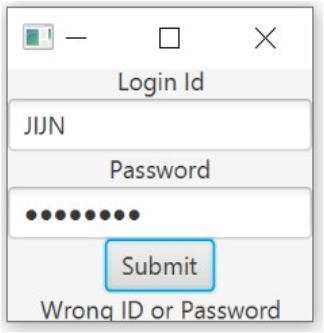
```
        void ij()
        {
            Label l= new Label("ENTER THE ID TO BE UPDATED");
            Label ls= new Label("SELECT FIELD TO BE UPDATED");
            Label lp= new Label();
            VBox v= new VBox();
            ComboBox comboBox = new ComboBox();
            comboBox.getItems().add("ID");
            comboBox.getItems().add("NAME");
            comboBox.getItems().add("QUIZ");
            comboBox.getItems().add("A1");
            comboBox.getItems().add("A2");
            comboBox.getItems().add("EXAM");
            TextField ti=new TextField();
            Button bu= new Button("UPDATE");
            Button bunt= new Button("Go Back");
            v.getChildren().addAll(l,ti,lp,ls,comboBox,bu,bunt);
            v.setAlignment(Pos.CENTER);
            bunt.setOnAction(f->{
          p.setScene(mi);
          });
            bu.setOnAction(e->{
            try
            {
                 ResultSet rs=st.executeQuery("select * from Java2 where id='"+ti.getText()+"'");
                 rs.next();
                String uid=rs.getString(1);
             }
            catch(Exception nm)
            {
                lp.setText("Record does not exsists");
                return;
            }
            String a=""+comboBox.getValue();
            VBox vin= new VBox();
            TextField tin=new TextField();
             Button buntin= new Button("Go Back");
                 Button buin= new Button("UPDATE");
                 buntin.setOnAction(ekjdfd->{p.setScene(ij);});
                 Label linp= new Label();
                 Label lin=new Label();
                 switch(a)
                     {
                       case "NAME":
                       case "ID":
                         lin.setText("ENTER THE NEW "+a);
                        break;
                       case "QUIZ":
                       case "A1":
                       case "A2":
                       case "EXAM":
                           lin.setText("ENTER THE NEW MARKS");
                           linp.setText("NOTE: CumulativeMark and grade will be updated automatically");
                         break;
                     }
                 vin.getChildren().addAll(lin,tin,linp,buin,buntin);
                 vin.setAlignment(Pos.CENTER);
                 ijin=new Scene(vin,340,150);
                 p.setScene(ijin);
                 buin.setOnAction(ekfd->
                 {
                     query="update Java2 set "+a+"='"+tin.getText()+"' where id='"+ti.getText()+"'";
                     try
                     {
                         st.executeUpdate(query);
                         linp.setText("UPDATED");
                         String s=ti.getText();
                         if(a=="ID")
                         s=tin.getText();
                         ResultSet rs=st.executeQuery("select * from Java2 where id='"+s+"'");
                         rs.next();
                         double jk=cal(Integer.parseInt(rs.getString(3)),Integer.parseInt(rs.getString(4))
                             ,Integer.parseInt(rs.getString(5)),Integer.parseInt(rs.getString(6)));
                         st.executeUpdate("update Java2 set Cumulative_Mark"
                             +"="+jk+" where id='"+s+"'");
                         st.executeUpdate("update Java2 set grade"
                             +"='"+gr(jk)+"' where id='"+s+"'");
                     }
                     catch(Exception elk)
                     {
                         linp.setText("INVALID INPUT");
                     }
                    });
               });
            ij= new Scene(v,170,190);
        }
        void iu()
        {
            Label l= new Label("ENTER THE ID TO BE SEARCHED");
            Label lp= new Label();
            VBox v= new VBox();
            TextField ti=new TextField();
            Button bu= new Button("SEARCH");
            Button bunt= new Button("Go Back");
```

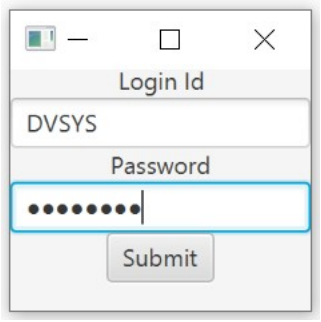
```
            v.getChildren().addAll(l,ti,lp,bu,bunt);
            v.setAlignment(Pos.CENTER);
            bunt.setOnAction(f->{
          p.setScene(mi);
          });
            bu.setOnAction(e->{
            try
            {
                VBox vi= new VBox();
                Button but= new Button("Go Back");
                but.setOnAction(mbn->{
          p.setScene(upi);
          });
                ResultSet rs=st.executeQuery("select * from Java2 where id='"+ti.getText()+"'");
                rs.next();
                Label lu= new Label(
                        "ID: "+rs.getString(1)+
                         "\nNAME: "+rs.getString(2)+
                         "\nQUIZ MARKS: "+rs.getInt(3)+
                         "\nA1 MARKS: "+rs.getInt(4)+
                         "\nA2 MARKS: "+rs.getInt(5)+
                         "\nEXAM MARKS: "+rs.getInt(6)+
                         "\nCUMULATIVE MARKS: "+rs.getDouble(7)+
                         "\nGRADE: "+rs.getString(8)+"\n\n");
                         vi.getChildren().addAll(lu,but);
                         vi.setAlignment(Pos.CENTER);
                          up=new Scene(vi,170,180);
                          p.setScene(up);
            }
            catch(Exception nm)
            {
                lp.setText("Record does not exsists");
            }});
            upi= new Scene(v,170,150);
        }
        void ii()
        {
            Label l= new Label("ENTER THE DATA");
            Label lp= new Label();
            VBox v= new VBox();
            Button bu= new Button("Submit");
            Label li= new Label("\nENTER THE ID");
            TextField ti=new TextField();
            Label ln= new Label("ENTER THE NAME");
            TextField tn=new TextField();
            Label lq= new Label("ENTER THE QUIZ MARKS");
            TextField tq=new TextField();
            Label l1= new Label("ENTER THE A1 MARKS");
            TextField t1=new TextField();
            Label l2= new Label("ENTER THE A2 MARKS");
            TextField t2=new TextField();
            Label le= new Label("ENTER THE EXAM MARKS");
            TextField te=new TextField();
            Button bunt= new Button("Go Back");
             bunt.setOnAction(f->{
          p.setScene(mi);
          });
            v.getChildren().addAll(l,li,ti,ln,tn,lq,tq,l1,t1,l2,t2,le,te,lp,bu,bunt);
            v.setAlignment(Pos.CENTER);
            ii= new Scene(v,300,370);
            bu.setOnAction(e ->{
            try
             {
                double m=cal(Integer.parseInt(tq.getText()),Integer.parseInt(t1.getText())
                ,Integer.parseInt(t2.getText()),Integer.parseInt(te.getText()));
                String g=gr(m);
             query="insert into java2 values"
         +"('"+ti.getText()+"','"+tn.getText()+"',"+Integer.parseInt(tq.getText())
         +","+Integer.parseInt(t1.getText())+","+Integer.parseInt(t2.getText())
         +","+Integer.parseInt(te.getText())+","+m+",'"+g+"')";
            lp.setText("CumulativeMark: "+m+"\nGrade: "+g);
            st.execute(query);
            }
            catch(Exception p)
            {
                lp.setText("Invalid input");
            }});
        }
        void mii()
        {
            Label l= new Label("Which operation do you want to perform");
            Label lp= new Label();
            VBox v= new VBox();
            Button bu= new Button("Submit");
            RadioButton u,s,i;
            u=new RadioButton("Insert Record");
            s= new RadioButton("Update Record");
            i= new RadioButton("Search Record");
            ToggleGroup q= new ToggleGroup();
            u.setToggleGroup(q);
            s.setToggleGroup(q);
            i.setToggleGroup(q);
```

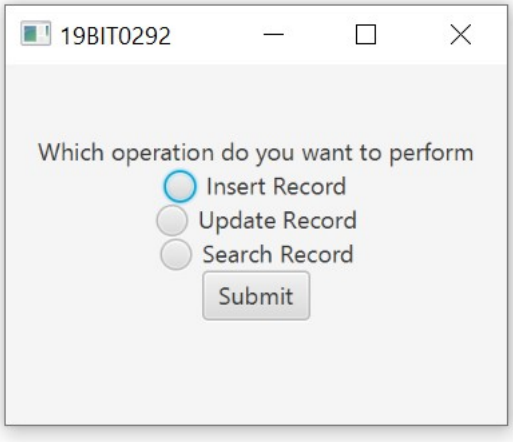
```
                bu.setOnAction(e ->
                 {
                    if (u.isSelected())
                        {
                          p.setScene(ii);
                        }
                    else if (s.isSelected())
                         {
                          p.setScene(ij);
                         }
                     else if (i.isSelected())
                         {
                          p.setScene(upi);
                         }
                 });
                v.getChildren().addAll(l,u,s,i,bu,lp);
                v.setAlignment(Pos.CENTER);
                mi= new Scene(v, 250, 180);
                 p.setScene(mi);
              }
            void ct() throws SQLException
            {
                st=con.createStatement();
            query = "CREATE TABLE Java2("
     + "id varchar(8) PRIMARY KEY,"
     + "name varchar2(20),"
     + "quiz int,"
     + "a1 int,"
     + "a2 int,"
     + "exam int,"
     + "cumulative_mark number(5,2),"
     +"grade varchar2(2),"
    + "check(length(id)=8 and "
    + "a1>=0 and a1<=100 and a2>=0 and a2<=100 and "
    + "exam>=0 and exam<=100))";
      st.execute(query);
       query="insert into java2 values"
            +"('11111111','X',100,85,100,88,90.55,'HD')";
      st.execute(query);
      query="insert into java2 values"
           +"('22222222','Y',100,60,80,75,75.00,'DI')";
      st.execute(query);
           }
        @Override
    public void start(Stage primaryStage) {
        primaryStage.setTitle("19BIT0292");
        p=primaryStage;
        Label l=new Label("Login Id");
         TextField t1=new TextField();
        Label l1=new Label("Password");
         PasswordField t2= new PasswordField();
         Button b1=new Button("Submit");
        Label lp=new Label();
        VBox r=new VBox();
        r.getChildren().add(l);
        r.getChildren().add(t1);
        r.getChildren().add(l1);
        r.getChildren().add(t2);
        r.getChildren().add(b1);
        r.getChildren().add(lp);
        r.setAlignment(Pos.CENTER);
        b1.setOnAction(e->{

     try{
         con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1525:bhaumik",t1.getText(),t2.getText());
          ct();
          ii();
          iu();
          ij();
          mii();
         }
     catch(Exception ek)
     {
         lp.setText("Wrong ID or Password");
     }
     }
);


        in=new Scene(r,150,120);
        p.setScene(in);
         p.show();
       }

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        launch(args);
    }

}
```

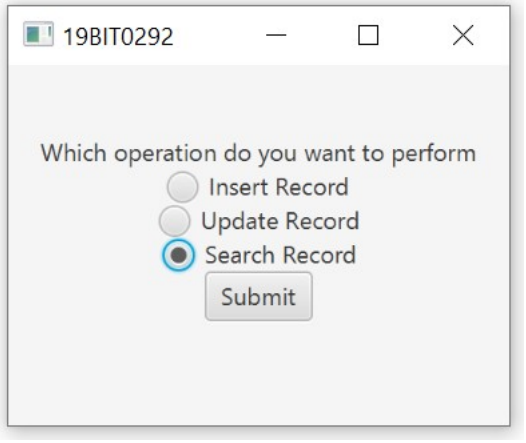
OUTPUT

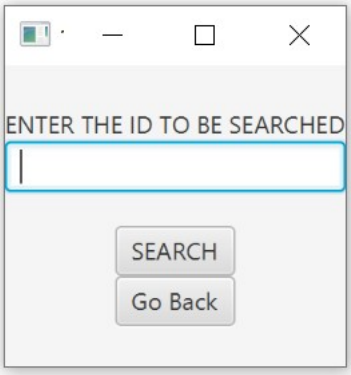

Login Id
Password
Submit

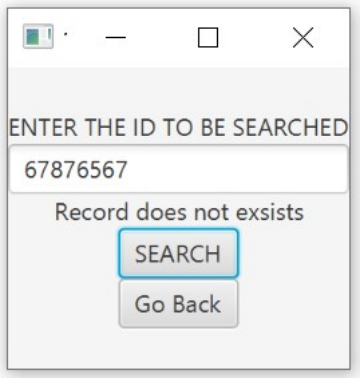

Login Id
JIJN
Password
Submit
Wrong ID or Password

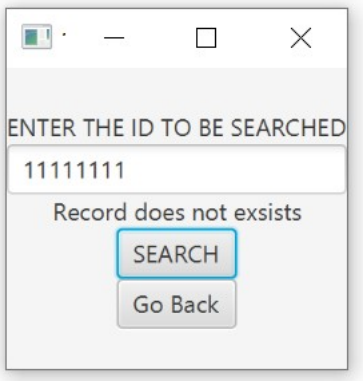

Login Id
DVSYS
Password
Submit

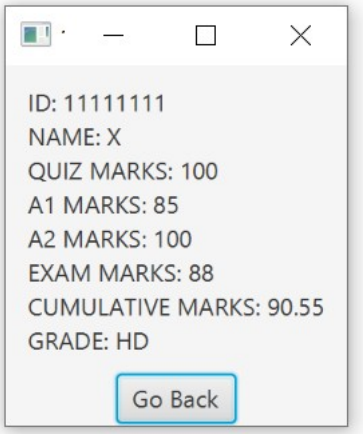

19BIT0292
Which operation do you want to perform
Insert Record
Update Record
Search Record
Submit

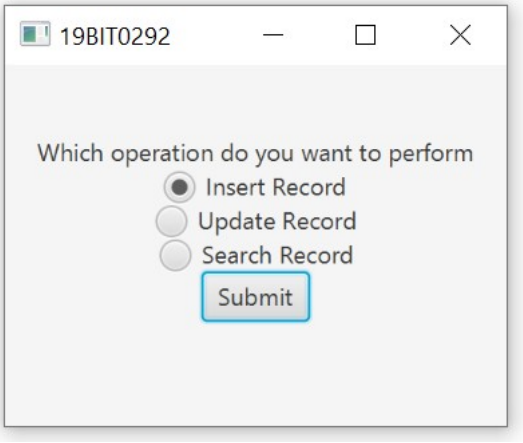

19BIT0292
Which operation do you want to perform
Insert Record
Update Record
Search Record
Submit

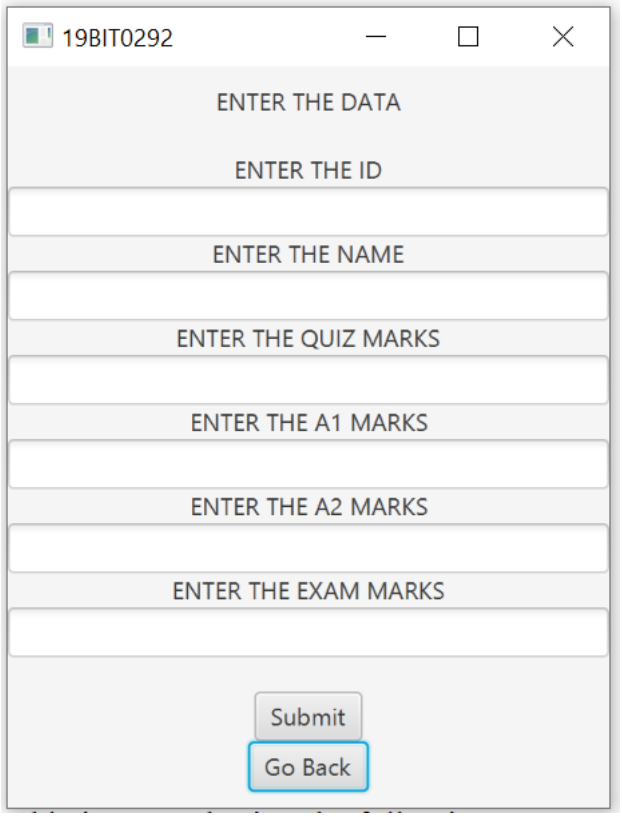

ENTER THE ID TO BE SEARCHED
SEARCH
Go Back

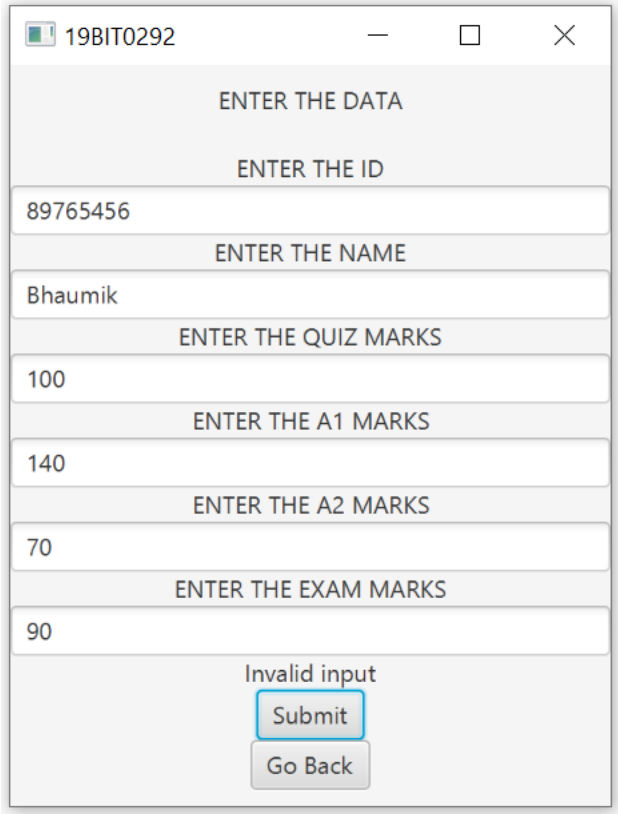

ENTER THE ID TO BE SEARCHED
67876567
Record does not exsists
SEARCH
Go Back

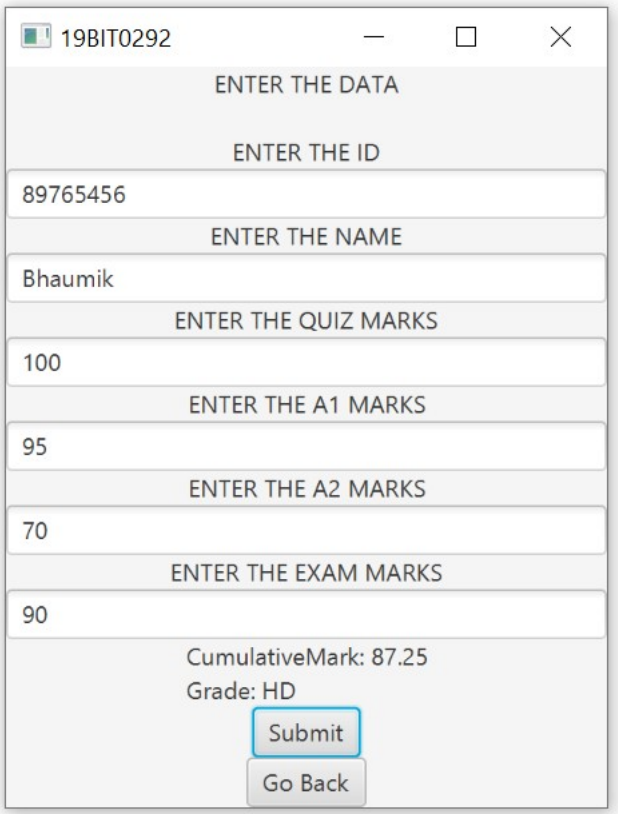

ENTER THE ID TO BE SEARCHED
11111111
Record does not exsists
SEARCH
Go Back

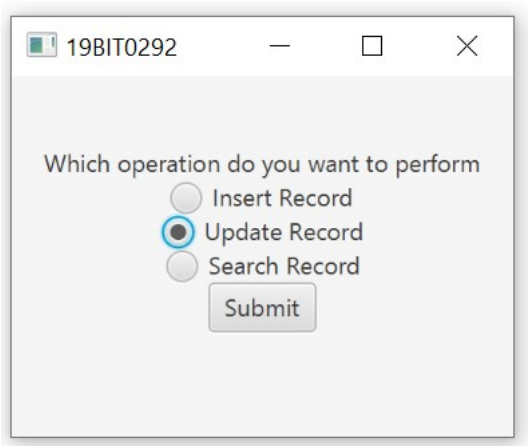

ID: 11111111
NAME: X
QUIZ MARKS: 100
A1 MARKS: 85
A2 MARKS: 100
EXAM MARKS: 88
CUMULATIVE MARKS: 90.55
GRADE: HD
Go Back

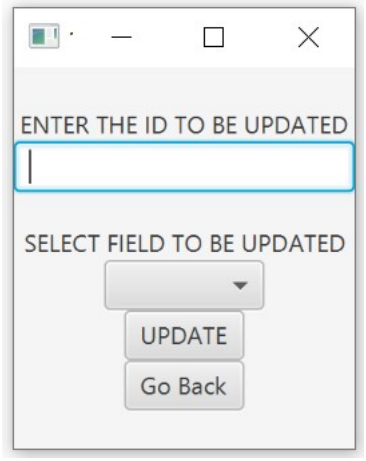

19BIT0292
Which operation do you want to perform
Insert Record
Update Record
Search Record
Submit

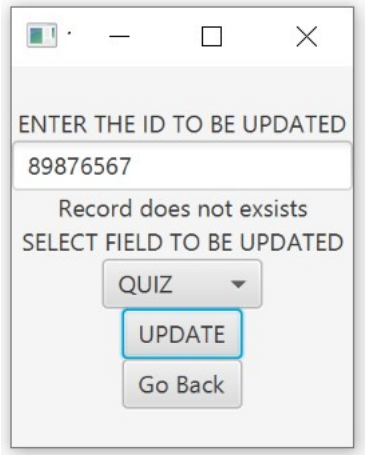

19BIT0292
ENTER THE DATA
ENTER THE ID
ENTER THE NAME
ENTER THE QUIZ MARKS
ENTER THE A1 MARKS
ENTER THE A2 MARKS
ENTER THE EXAM MARKS
Submit
Go Back

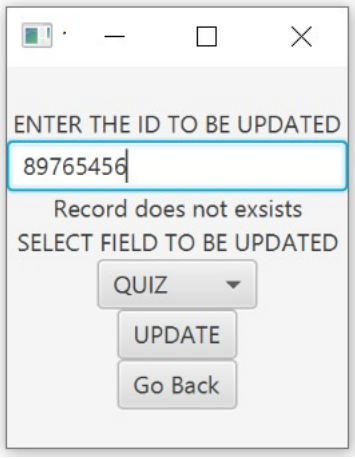

19BIT0292
ENTER THE DATA
ENTER THE ID
89765456
ENTER THE NAME
Bhaumik
ENTER THE QUIZ MARKS
100
ENTER THE A1 MARKS
140
ENTER THE A2 MARKS
70
ENTER THE EXAM MARKS
90
Invalid input
Submit
Go Back

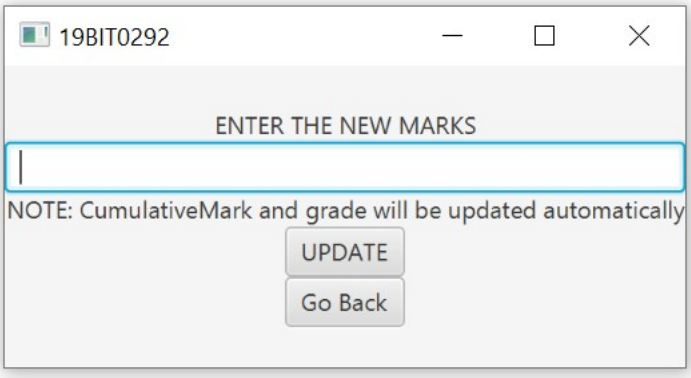

19BIT0292
ENTER THE DATA
ENTER THE ID
89765456
ENTER THE NAME
Bhaumik
ENTER THE QUIZ MARKS
100
ENTER THE A1 MARKS
95
ENTER THE A2 MARKS
70
ENTER THE EXAM MARKS
90
CumulativeMark: 87.25
Grade: HD
Submit
Go Back

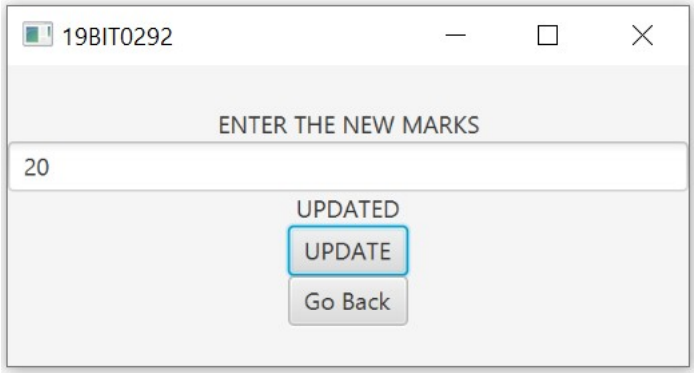

19BIT0292
Which operation do you want to perform
Insert Record
Update Record
Search Record
Submit

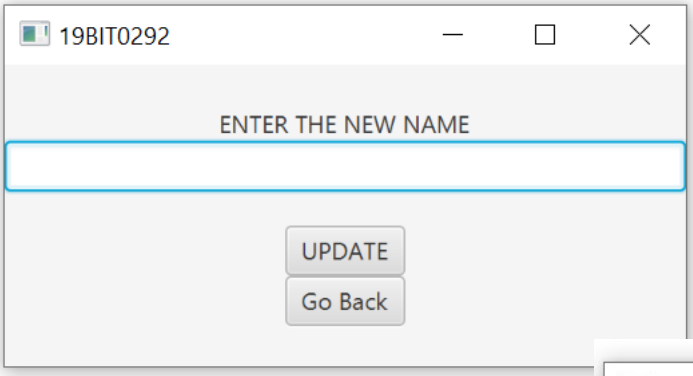

ENTER THE ID TO BE UPDATED
SELECT FIELD TO BE UPDATED
UPDATE
Go Back

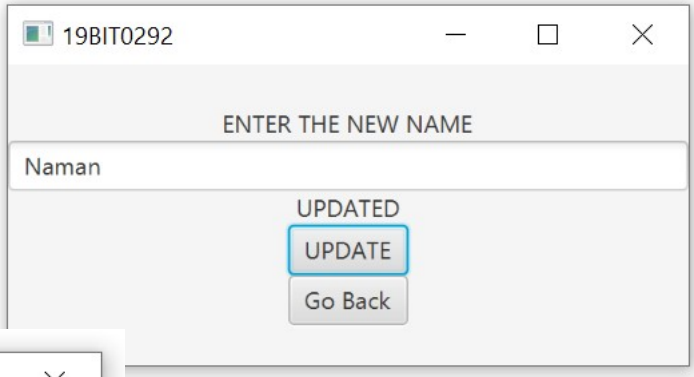

ENTER THE ID TO BE UPDATED
89876567
Record does not exsists
SELECT FIELD TO BE UPDATED
QUIZ
UPDATE
Go Back

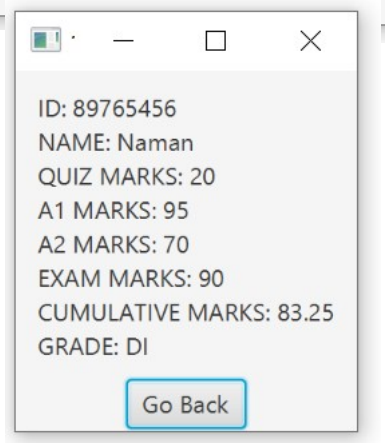

ENTER THE ID TO BE UPDATED
89765456
Record does not exsists
SELECT FIELD TO BE UPDATED
QUIZ
UPDATE
Go Back


19BIT0292
ENTER THE NEW MARKS
NOTE: CumulativeMark and grade will be updated automatically
UPDATE
Go Back


19BIT0292
ENTER THE NEW MARKS
20
UPDATED
UPDATE
Go Back


19BIT0292
ENTER THE NEW NAME
UPDATE
Go Back


19BIT0292
ENTER THE NEW NAME
Naman
UPDATED
UPDATE
Go Back


ID: 89765456
NAME: Naman
QUIZ MARKS: 20
A1 MARKS: 95
A2 MARKS: 70
EXAM MARKS: 90
CUMULATIVE MARKS: 83.25
GRADE: DI
Go Back

2. Assume the participant table is created using the following query,

```
CREATE TABLE PARTICIPANT (PARTICIPANT_NM
VARCHAR(255), PARTICIPANT_ID INT,MEETING_NM
VARCHAR(20),MEETING_DAY VARCHAR(15))
```

Write SQL Statements to accomplish the following in a Java Program

1. Determine the names of the columns in the MEETING table, and display the column names on the console.

2. Write a query to find the names of all participants for the meeting with ID 1144. Display the names on the console, preceded by the message, “Names of participants in meeting 1144”.

3. Insert a new participant with your name as the participant’s name.

4. Count the number of people participating in the meeting with ID 1105.

5. Display a message on the console that gives both the meeting name and the number of participants.

6. Determine the names of all people who participate in meetings that meet on Tuesdays. Display the names, preceded by the message, “Participants attending Tuesday meetings”.

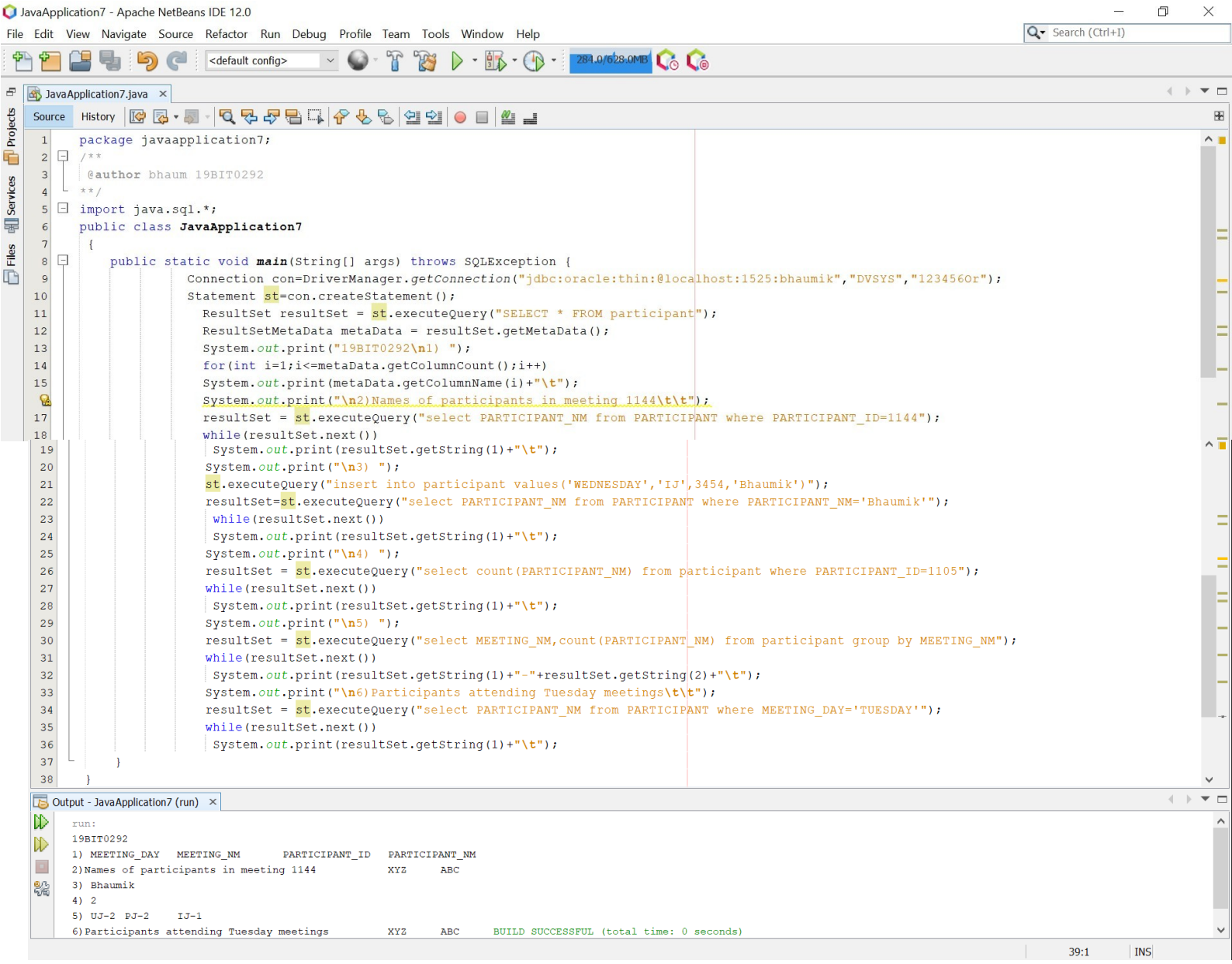
DATA IN THE TABLE

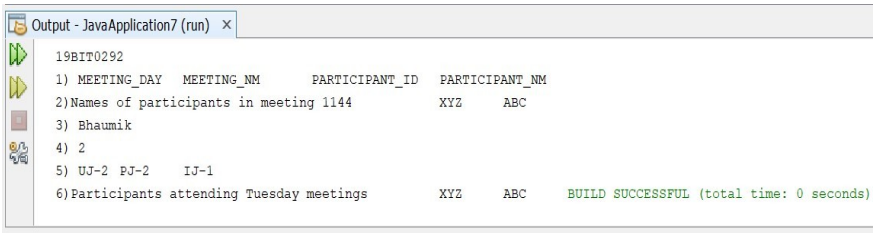
```
MEETING_DAY     MEETING_NM          PARTICIPANT_ID
--------------- ------------------- --------------
PARTICIPANT_NM
--------------------------------------------------
TUESDAY         PJ                            1144
XYZ

TUESDAY         PJ                            1144
ABC

MONDAY          UJ                            1105
KABC


MEETING_DAY     MEETING_NM          PARTICIPANT_ID
--------------- ------------------- --------------
PARTICIPANT_NM
--------------------------------------------------
MONDAY          UJ                            1105
HBJK
```

CODE

```
package javaapplication7;
/**
 @author bhaum 19BIT0292
**/
import java.sql.*;
public class JavaApplication7
 {
    public static void main(String[] args) throws SQLException {
              Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1525:bhaumik","DV
SYS","123456Or");
              Statement st=con.createStatement();
                ResultSet resultSet = st.executeQuery("SELECT * FROM
participant");
                ResultSetMetaData metaData = resultSet.getMetaData();
                System.out.print("19BIT0292\n1) ");
                for(int i=1;i<=metaData.getColumnCount();i++)
                System.out.print(metaData.getColumnName(i)+"\t");
                System.out.print("\n2)Names of participants in meeting 1144\t\
t");
                resultSet = st.executeQuery("select PARTICIPANT_NM from
PARTICIPANT where PARTICIPANT_ID=1144");
                while(resultSet.next())
                 System.out.print(resultSet.getString(1)+"\t");
                System.out.print("\n3) ");
                st.executeQuery("insert into participant
values('WEDNESDAY','IJ',3454,'Bhaumik')");
                resultSet=st.executeQuery("select PARTICIPANT_NM from
PARTICIPANT where PARTICIPANT_NM='Bhaumik'");
                 while(resultSet.next())
                 System.out.print(resultSet.getString(1)+"\t");
                System.out.print("\n4) ");
                resultSet = st.executeQuery("select count(PARTICIPANT_NM) from
participant where PARTICIPANT_ID=1105");
                while(resultSet.next())
                 System.out.print(resultSet.getString(1)+"\t");
                System.out.print("\n5) ");
                resultSet = st.executeQuery("select
MEETING_NM,count(PARTICIPANT_NM) from participant group by MEETING_NM");
                while(resultSet.next())

System.out.print(resultSet.getString(1)+"-"+resultSet.getString(2)+"\t");
                System.out.print("\n6)Participants attending Tuesday meetings\
t\t");
                resultSet = st.executeQuery("select PARTICIPANT_NM from
PARTICIPANT where MEETING_DAY='TUESDAY'");
                while(resultSet.next())
                 System.out.print(resultSet.getString(1)+"\t");
    }
   }
```

SCREENSHOT



OUTPUT

```
run:
19BIT0292
1) MEETING_DAY      MEETING_NM      PARTICIPANT_ID PARTICIPANT_NM
2)Names of participants in meeting 1144          XYZ     ABC
3) Bhaumik
4) 2
5) UJ-2     PJ-2     IJ-1
6)Participants attending Tuesday meetings        XYZ     ABC     BUILD SUCCESSFUL (total time: 0 seconds)
```