**import** javafx.application.Application;

**import** java.text.SimpleDateFormat;

**import** java.util.Date;

**import** javafx.event.ActionEvent;

**import** javafx.event.EventHandler;

**import** javafx.scene.Scene;

**import** javafx.scene.control.Button;

**import** javafx.scene.layout.StackPane;

**import** javafx.stage.Stage;

**import** javafx.scene.control.TextField;

**import** javafx.scene.layout.VBox;

**import** javafx.scene.layout.BorderPane;

**import** javafx.scene.control.TextField;

**import** javafx.scene.layout.GridPane;

**import** javafx.scene.control.Label;

**import** javafx.geometry.Pos;

**import** javafx.scene.text.Text;

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

**public** **class** Main **extends** Application **implements** EventHandler<ActionEvent> {

**public** **static** String Func(String date) {

**char**[] chararr = date.toCharArray();

String s1=String.*valueOf*(chararr[0]);

String s2=String.*valueOf*(chararr[1]);

String day=s1+s2;

s1=String.*valueOf*(chararr[3]);

s2=String.*valueOf*(chararr[4]);

String month=s1+s2;

s1=String.*valueOf*(chararr[6]);

s2=String.*valueOf*(chararr[7]);

String s3=String.*valueOf*(chararr[8]);

String s4=String.*valueOf*(chararr[9]);

String year=s1+s2+s3+s4;

String m,d,y;

**int** da=Integer.*parseInt*(day);

**int** mo=Integer.*parseInt*(month);

**int** ye=Integer.*parseInt*(year);

**if**(mo%2==0) {

**if**(mo<8){

**if**(mo==02) {

**if**(ye%4==0) {

**if**((da+7)>29) {

da=da+7-29;

mo++;

}

**else** {

da=da+7;

}

}

**else** {

**if**((da+7)>28) {

da=da+7-28;

mo++;

}

**else** {

da=da+7;

}

}

}

**else** {

**if**((da+7)>30) {

da=da+7-30;

mo++;

}

**else** {

da=da+7;

}

}

}

**else** {

**if**(mo==12) {

**if**((da+7)>31) {

da=da+7-31;

mo=1;

ye++;

}

**else** {

da=da+7;

}

}

**else** {

**if**((da+7)>31) {

da=da+7-31;

mo++;

}

**else** {

da=da+7;

}

}

}

}

**else** {

**if**(mo<8) {

**if**((da+7)>31) {

da=da+7-31;

mo++;

}

**else** {

da=da+7;

}

}

**else** {

**if**((da+7)>30) {

da=da+7-30;

mo++;

}

**else** {

da=da+7;

}

}

}

d=String.*valueOf*(da);

m=String.*valueOf*(mo);

y=String.*valueOf*(ye);

String fr="";

**if**(da<10)d="0"+d;

**if**(mo<10)m="0"+m;

fr=d+"/"+m+"/"+y;

**return** fr;

}

**public** **static** **int** Fun(String date1,String date2) {

**char**[] chararr1 = date1.toCharArray();

**char**[] chararr2 = date2.toCharArray();

String s1=String.*valueOf*(chararr1[0]);

String s2=String.*valueOf*(chararr1[1]);

String day1=s1+s2;

s1=String.*valueOf*(chararr1[3]);

s2=String.*valueOf*(chararr1[4]);

String month1=s1+s2;

s1=String.*valueOf*(chararr1[6]);

s2=String.*valueOf*(chararr1[7]);

String s3=String.*valueOf*(chararr1[8]);

String s4=String.*valueOf*(chararr1[9]);

String year1=s1+s2+s3+s4;

s1=String.*valueOf*(chararr2[0]);

s2=String.*valueOf*(chararr2[1]);

String day2=s1+s2;

s1=String.*valueOf*(chararr2[3]);

s2=String.*valueOf*(chararr2[4]);

String month2=s1+s2;

s1=String.*valueOf*(chararr2[6]);

s2=String.*valueOf*(chararr2[7]);

s3=String.*valueOf*(chararr2[8]);

s4=String.*valueOf*(chararr2[9]);

String year2=s1+s2+s3+s4;

**int** da1=Integer.*parseInt*(day1);

**int** mo1=Integer.*parseInt*(month1);

**int** ye1=Integer.*parseInt*(year1);

**int** da2=Integer.*parseInt*(day2);

**int** mo2=Integer.*parseInt*(month2);

**int** ye2=Integer.*parseInt*(year2);

**int** df=da1-da2;

**int** mf=mo1-mo2;

**int** yf=ye1-ye2;

**double** mf1=mf\*30.41;

**double** r=df+mf1+(yf\*365);

**int** r1=(**int**)r;

**return** r1;

}

Button btn,bt,bt1;

**private** **static** Connection *con* = **null**;

**private** **static** Statement *stmt* = **null**;

@Override

**public** **void** start(Stage primaryStage) **throws** Exception {

// **TODO** Auto-generated method stub

StackPane root = **new** StackPane();

btn=**new** Button("Library\nStaff");

btn.setOnAction(**this**);

//bt1=new Button("Library\nStaff");

//bt1.setOnAction(this);

bt=**new** Button("USER");

bt.setOnAction(action->{

Stage stg=**new** Stage();

Label l1=**new** Label("Name");

TextField txt1=**new** TextField();

txt1.setText("NULL");

Label l2=**new** Label("Subject");

TextField txt2=**new** TextField();

txt2.setText("NULL");

Label l3=**new** Label("Edition");

TextField txt3=**new** TextField();

txt3.setText("NULL");

Label l4=**new** Label("Author");

TextField txt4=**new** TextField();

txt4.setText("NULL");

Text t=**new** Text();

t.setText("Replace Null\nValues with search\n values");

Button bu=**new** Button("Search");

bu.setOnAction(action1->{

String que="";

String a,b,c,d;

**int** check=0;

a=txt1.getText();

b=txt2.getText();

c=txt3.getText();

d=txt4.getText();

**if**(a.compareTo("NULL")!=0) {

**if**(check==0) {

que=que+"Book\_Name= '"+a+"'";

check=1;

}

**else** **if**(check==1) {

que=que+" AND "+"Book\_Name= '"+a+"'";

}

}

**if**(b.compareTo("NULL")!=0) {

**if**(check==0) {

que=que+"Subject= '"+b+"'";

check=1;

}

**else** **if**(check==1) {

que=que+" AND "+"Subject= '"+b+"'";

}

}

**if**(c.compareTo("NULL")!=0) {

**if**(check==0) {

que=que+"Edition="+c;

check=1;

}

**else** **if**(check==1) {

que=que+" AND "+"Edition="+c;

}

}

**if**(d.compareTo("NULL")!=0) {

**if**(check==0) {

que=que+"Author='"+d+"'";

check=1;

}

**else** **if**(check==1) {

que=que+" AND "+"Author='"+d+"'";

}

}

String result="Name Subject Edition Author Issued Status\n";

String query="SELECT \* FROM Book WHERE "+que;

**try** {

ResultSet rs=*stmt*.executeQuery(query);

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

String name=rs.getString("Book\_Name");

String subject=rs.getString("Subject");

String edi=rs.getString("Edition");

String auth=rs.getString("Author");

String iss=rs.getString("Issued");

String temp=name+" "+subject+" "+edi+" "+auth+" "+iss+"\n";

result=result+temp;

}

t.setText(result);

stg.show();

}

**catch**(Exception e) {

t.setText("No Book Found");

stg.show();

}

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1, 0, 0);

gridPane1.add(txt1, 1, 0);

gridPane1.add(l2, 2, 0);

gridPane1.add(txt2, 3, 0);

gridPane1.add(l3, 0, 1);

gridPane1.add(txt3, 1, 1);

gridPane1.add(l4, 2, 1);

gridPane1.add(txt4, 3, 1);

gridPane1.add(bu, 2, 2);

gridPane1.add(t, 2, 3);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

stg.setScene(scene1);

stg.setTitle("User Search Form");

stg.show();

});

GridPane gridPane = **new** GridPane();

//Setting size for the pane

gridPane.setMinSize(400, 400);

//Setting the padding

//gridPane.setPadding(new Insets(10, 10, 10, 10));

//Setting the vertical and horizontal gaps between the columns

gridPane.setVgap(50);

gridPane.setHgap(50);

//Setting the Grid alignment

gridPane.setAlignment(Pos.***CENTER***);

gridPane.add(btn, 0, 0);

//gridPane.add(bt1, 0, 1);

gridPane.add(bt, 0, 1);

root.getChildren().add(gridPane);

Scene scene=**new** Scene(root,400,400);

primaryStage.setScene(scene);

primaryStage.setTitle("Library");

primaryStage.show();

}

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

**try**{

*con*=DriverManager.*getConnection*("jdbc:ucanaccess://D:\\Database1.accdb");

*stmt*=*con*.createStatement();

**if**(*con*!=**null**){

System.***out***.println("DB Connected");

}

} **catch** (Exception e) {

e.printStackTrace();

}

*launch*(args);

}

**public** **void** handle(ActionEvent event) {

**if** (event.getSource() == btn) {

Stage st1=**new** Stage();

Button B=**new** Button("Login");

TextField txt1= **new** TextField();

TextField txt2 = **new** TextField();

Text t1=**new** Text();

Label l1= **new** Label("User ID");

Label l2 = **new** Label("Password");

String uid;

String pass="";

B.setOnAction(action -> {

String ti=txt1.getText();

String pas=txt2.getText();

**int** ad\_sta=-1;

String hnew="SELECT \* FROM Staff WHERE AID="+ti;

String passnew="";

**try** {

ResultSet rs=*stmt*.executeQuery(hnew);

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

passnew=rs.getString("PassKey");

ad\_sta=rs.getInt("Admin\_Status");

}

}

**catch**(Exception e) {

t1.setText("Invalid User Name");

st1.show();

}

**if**((pas.compareTo(passnew)==0)) {

st1.close();

**if**(ad\_sta==1){

Stage st=**new** Stage();

Button B1=**new** Button("Add Book");

B1.setOnAction(action1 -> {

Stage st2=**new** Stage();

Label l1\_B1=**new** Label("Name");

TextField txt1\_B1=**new** TextField();

Label l2\_B1=**new** Label("Subject");

TextField txt2\_B1=**new** TextField();

Label l3\_B1=**new** Label("Price");

TextField txt3\_B1=**new** TextField();

Label l4\_B1=**new** Label("Edition");

TextField txt4\_B1=**new** TextField();

Label l5\_B1=**new** Label("Author");

TextField txt5\_B1=**new** TextField();

Button b\_B1=**new** Button("ADD");

b\_B1.setOnAction(action2->{

**try**{

String a,b,d,e,q;

a=txt1\_B1.getText();

b=txt2\_B1.getText();

q=txt3\_B1.getText();

d=txt4\_B1.getText();

e=txt5\_B1.getText();

//System.out.println(a+b+q+d+e);

String s="INSERT INTO Book(Book\_Name,Subject,Edition,Price,Author,Issued) VALUES('" + a +"'"+ ","+"'" + b+"'" + ","+ d + "," + q + "," +"'"+ e +"'"+ ",0)";

**int** c= *stmt*.executeUpdate(s);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B1, 0, 0);

gridPane1.add(txt1\_B1, 2, 0);

gridPane1.add(l2\_B1, 0, 1);

gridPane1.add(txt2\_B1, 2, 1);

gridPane1.add(l3\_B1, 0, 2);

gridPane1.add(txt3\_B1, 2, 2);

gridPane1.add(l4\_B1, 0, 3);

gridPane1.add(txt4\_B1, 2, 3);

gridPane1.add(l5\_B1, 0, 4);

gridPane1.add(txt5\_B1, 2, 4);

gridPane1.add(b\_B1, 1, 5);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("New Book Entry Form");

st2.show();

});

Button B2=**new** Button("Remove Book");

B2.setOnAction(action1->{

Label l1\_B2=**new** Label("Admin ID");

TextField txt1\_B2=**new** TextField();

Label l2\_B2=**new** Label("Password");

TextField txt2\_B2=**new** TextField();

Label l3\_B2=**new** Label("Book ID");

TextField txt3\_B2=**new** TextField();

Stage st2=**new** Stage();

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B2, 0, 0);

gridPane1.add(txt1\_B2, 2, 0);

gridPane1.add(l2\_B2, 0, 1);

gridPane1.add(txt2\_B2, 2, 1);

gridPane1.add(l3\_B2, 0, 2);

gridPane1.add(txt3\_B2, 2, 2);

Text t\_B2=**new** Text();

Button b\_B2=**new** Button("Remove");

b\_B2.setOnAction(action2->{

**try** { String a=txt3\_B2.getText();

String s="DELETE FROM Book WHERE B\_ID='"+a+"'";

**int** c=*stmt*.executeUpdate(s);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

});

gridPane1.add(b\_B2, 1, 3);

gridPane1.add(t\_B2, 1, 4);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Book Remove Form");

st2.show();

});

Button B3=**new** Button("Edit Book Info");

B3.setOnAction(action2->{

Label l\_B3=**new** Label("Book ID");

TextField txt\_B3=**new** TextField();

Stage st2=**new** Stage();

Label l1\_B1=**new** Label("Name");

TextField txt1\_B1=**new** TextField();

txt1\_B1.setText("NULL");

Label l2\_B1=**new** Label("Subject");

TextField txt2\_B1=**new** TextField();

txt2\_B1.setText("NULL");

Label l3\_B1=**new** Label("Price");

TextField txt3\_B1=**new** TextField();

txt3\_B1.setText("NULL");

Label l4\_B1=**new** Label("Edition");

TextField txt4\_B1=**new** TextField();

txt4\_B1.setText("NULL");

Label l5\_B1=**new** Label("Author");

TextField txt5\_B1=**new** TextField();

txt5\_B1.setText("NULL");

Button b\_B1=**new** Button("UPDATE");

b\_B1.setOnAction(action3->{

String a,b,q,d,e1,j;

j=txt\_B3.getText();

a=txt1\_B1.getText();

b=txt2\_B1.getText();

q=txt3\_B1.getText();

d=txt4\_B1.getText();

e1=txt5\_B1.getText();

**if**(a.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Book\_Name = '"+a+"'"+ "WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(b.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Subject = '"+b+"'"+ "WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(q.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Price = "+q+ " WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(d.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Edition ="+d+ " WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(e1.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Author = '"+e1+"'"+ "WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B1, 0, 0);

gridPane1.add(txt1\_B1, 2, 0);

gridPane1.add(l2\_B1, 0, 1);

gridPane1.add(txt2\_B1, 2, 1);

gridPane1.add(l3\_B1, 0, 2);

gridPane1.add(txt3\_B1, 2, 2);

gridPane1.add(l4\_B1, 0, 3);

gridPane1.add(txt4\_B1, 2, 3);

gridPane1.add(l5\_B1, 0, 4);

gridPane1.add(txt5\_B1, 2, 4);

gridPane1.add(l\_B3, 0, 5);

gridPane1.add(txt\_B3, 2, 5);

gridPane1.add(b\_B1, 1, 6);

Text t1\_B3=**new** Text("Change NULL to New Values");

Text t2\_B3=**new** Text("If Field is Required to be Updated");

gridPane1.add(t1\_B3, 1, 7);

gridPane1.add(t2\_B3, 1, 8);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Edit Book Information Form");

st2.show();

});

Button B4=**new** Button("Issue Book");

B4.setOnAction(action1->{

Stage st2=**new** Stage();

Label l1\_B4=**new** Label("Book ID");

TextField txt1\_B4=**new** TextField();

Label l2\_B4=**new** Label("User ID");

TextField txt2\_B4=**new** TextField();

Text t\_B4=**new** Text();

Button b\_B4=**new** Button("ISSUE");

b\_B4.setOnAction(action2->{

String a=txt1\_B4.getText();

**int** isid=-1;

String hbB4="SELECT Issued FROM Book WHERE B\_ID="+a;

**try**{

ResultSet rs=*stmt*.executeQuery(hbB4);

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

isid=rs.getInt("Issued");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

**if**(isid==0){ SimpleDateFormat formatter = **new** SimpleDateFormat("dd/MM/yyyy");

Date date = **new** Date();

String s1=formatter.format(date);

String s2=*Func*(s1);

String b=txt2\_B4.getText();

String s="INSERT INTO Issued\_Books(U\_ID,B\_ID,Issue\_Date,Return\_Date) VALUES(" + b+ "," + a + ","+"'"+ s1+"'" + ",'" + s2 + "')";

String f="UPDATE Book SET Issued = 1 WHERE B\_ID ="+a;

**try**{

**int** c=*stmt*.executeUpdate(s);

**int** c1=*stmt*.executeUpdate(f);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**else** {

t\_B4.setText("Already Issued");

st2.show();

}

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B4, 0, 0);

gridPane1.add(txt1\_B4, 2, 0);

gridPane1.add(l2\_B4, 0, 1);

gridPane1.add(txt2\_B4, 2, 1);

gridPane1.add(b\_B4, 1, 2);

gridPane1.add(t\_B4, 1, 3);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Issue Book Form");

st2.show();

});

Button B5=**new** Button("Return Book");

B5.setOnAction(action1->{

Label l1\_B5=**new** Label("Issue ID");

TextField txt1\_B5=**new** TextField();

txt1\_B5.setText("NULL");

Text t1\_B5=**new** Text("OR");

Label l2\_B5=**new** Label("Book ID");

TextField txt2\_B5=**new** TextField();

txt2\_B5.setText("NULL");

Label l3\_B5=**new** Label("User ID");

TextField txt3\_B5=**new** TextField();

txt3\_B5.setText("NULL");

Button b\_B5=**new** Button("RETURN");

b\_B5.setOnAction(action2->{

SimpleDateFormat formatter = **new** SimpleDateFormat("dd/MM/yyyy");

Date date = **new** Date();

String s1=formatter.format(date);

String isid="",usid="",bkid="";

String a=txt1\_B5.getText();

String h="SELECT \* FROM Issued\_Books WHERE Issue\_ID="+a;

**try**{

ResultSet rs=*stmt*.executeQuery(h);

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

isid=rs.getString("Return\_Date");

usid=rs.getString("U\_ID");

bkid=rs.getString("B\_ID");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

**int** days=*Fun*(s1,isid);

**if**(days>0) {

**int** fine=5\*days;

**int** fine1=0;

String h1="SELECT Fine FROM User WHERE U\_ID="+usid;

**try**{

ResultSet rs=*stmt*.executeQuery(h1);

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

fine1=rs.getInt("Fine");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

fine=fine+fine1;

String fine\_s=String.*valueOf*(fine);

String s="UPDATE User SET Fine="+fine\_s+"WHERE U\_ID="+usid;

**try**{

**int** c=*stmt*.executeUpdate(s);

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

String s="UPDATE Book SET Issued=0 WHERE B\_ID="+bkid;

**try**{

**int** c=*stmt*.executeUpdate(s);

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

});

Stage st2=**new** Stage();

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B5, 0, 0);

gridPane1.add(txt1\_B5, 2, 0);

gridPane1.add(t1\_B5, 0, 1);

gridPane1.add(l2\_B5, 0, 2);

gridPane1.add(txt2\_B5, 2, 2);

gridPane1.add(l3\_B5, 0, 3);

gridPane1.add(txt3\_B5, 2, 3);

gridPane1.add(b\_B5, 1, 4);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Return Book Form");

st2.show();

});

Button B6=**new** Button("Collect Fine");

B6.setOnAction(action1->{

Label l1\_B6=**new** Label("User ID");

TextField txt1\_B6=**new** TextField();

Label l2\_B6=**new** Label("Amount Due");

TextField txt2\_B6=**new** TextField();

Label l3\_B6=**new** Label("Amount Paid");

TextField txt3\_B6=**new** TextField();

String a=txt1\_B6.getText();

**int** fine=0;

Button b1\_B6=**new** Button("Get Amount Due");

b1\_B6.setOnAction(action3->{

String h="SELECT \* FROM User WHERE U\_ID="+a;

**int** fine1=0;

**try**{

ResultSet rs=*stmt*.executeQuery(h);

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

fine1=rs.getInt("Fine");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

txt2\_B6.setText(String.*valueOf*(fine1));

});

Button b2\_B6=**new** Button("PAY");

b2\_B6.setOnAction(action3->{

String h="SELECT \* FROM User WHERE U\_ID="+a;

**int** fine1=0;

**try**{

ResultSet rs=*stmt*.executeQuery(h);

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

fine1=rs.getInt("Fine");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

String b=txt3\_B6.getText();

**int** paid=Integer.*parseInt*(b);

fine1=fine1-paid;

b=String.*valueOf*(fine1);

String h1="UPDATE User SET Fine="+b+ "WHERE U\_ID="+a;

**try**{

**int** c=*stmt*.executeUpdate(h1);

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

});

Stage st2=**new** Stage();

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B6, 0, 0);

gridPane1.add(txt1\_B6, 2, 0);

gridPane1.add(b1\_B6, 1, 1);

gridPane1.add(l2\_B6, 0, 2);

gridPane1.add(txt2\_B6, 2, 2);

gridPane1.add(b2\_B6, 1, 4);

gridPane1.add(l3\_B6, 0, 3);

gridPane1.add(txt3\_B6, 2, 3);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Fine Collection Form");

st2.show();

});

Button B7=**new** Button("Add User");

B7.setOnAction(action1->{

Stage st2=**new** Stage();

Label l1\_B7=**new** Label("Name");

TextField txt1\_B7=**new** TextField();

Label l2\_B7=**new** Label("Age");

TextField txt2\_B7=**new** TextField();

Label l3\_B7=**new** Label("PassWord");

TextField txt3\_B7=**new** TextField();

Text t\_B7=**new** Text();

Button b1\_B7=**new** Button("ADD");

b1\_B7.setOnAction(action2->{

String a,b,q;

a=txt1\_B7.getText();

b=txt2\_B7.getText();

q=txt3\_B7.getText();

**int** userid=-1;

String s="INSERT INTO User(User\_Name,Age,Book\_Count,Fine,PassKey) VALUES('"+a+"',"+b+",0,0,'"+q+ "')";

**try**{

**int** c=*stmt*.executeUpdate(s);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

s="SELECT \* FROM User WHERE User\_Name='"+a+"' AND Age="+b+" AND PassKey='"+q+"'";

**try**{

ResultSet rs=*stmt*.executeQuery(s);

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

userid=rs.getInt("U\_ID");

}

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

t\_B7.setText("User ID="+String.*valueOf*(userid));

st2.show();

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B7, 0, 0);

gridPane1.add(txt1\_B7, 2, 0);

gridPane1.add(l2\_B7, 0, 1);

gridPane1.add(txt2\_B7, 2, 1);

gridPane1.add(l3\_B7, 0, 2);

gridPane1.add(txt3\_B7, 2, 2);

gridPane1.add(b1\_B7, 1, 3);

gridPane1.add(t\_B7, 1, 4);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Add User");

st2.show();

});

Button B8=**new** Button("Add Staff");

B8.setOnAction(action1->{

Stage st2=**new** Stage();

Label l1\_B7=**new** Label("Name");

TextField txt1\_B7=**new** TextField();

Label l2\_B7=**new** Label("Age");

TextField txt2\_B7=**new** TextField();

Label l3\_B7=**new** Label("PassWord");

TextField txt3\_B7=**new** TextField();

Label l4\_B8=**new** Label("Admin Status");

TextField txt4\_B8=**new** TextField();

Text t\_B8=**new** Text();

Button b1\_B7=**new** Button("ADD");

b1\_B7.setOnAction(action2->{

String a,b,q,d;

a=txt1\_B7.getText();

b=txt2\_B7.getText();

q=txt3\_B7.getText();

d=txt4\_B8.getText();

**int** staffid=-1;

String s="INSERT INTO Staff(Staff\_Name,Age,PassKey,Admin\_Status) VALUES('"+a+"',"+b+",'"+q+ "',"+d+")";

**try**{

**int** c=*stmt*.executeUpdate(s);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

s="SELECT \* FROM Staff WHERE Staff\_Name = '"+a+"' AND Age ="+b+" AND PassKey= '"+q+"'";

**try**{

ResultSet rs=*stmt*.executeQuery(s);

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

staffid=rs.getInt("AID");

}

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

t\_B8.setText("Staff ID="+String.*valueOf*(staffid));

st2.show();

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B7, 0, 0);

gridPane1.add(txt1\_B7, 2, 0);

gridPane1.add(l2\_B7, 0, 1);

gridPane1.add(txt2\_B7, 2, 1);

gridPane1.add(l3\_B7, 0, 2);

gridPane1.add(txt3\_B7, 2, 2);

gridPane1.add(l4\_B8, 0, 3);

gridPane1.add(txt4\_B8, 2, 3);

gridPane1.add(b1\_B7, 1, 4);

gridPane1.add(t\_B8, 1, 5);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Add Staff Member");

st2.show();

});

Button B9=**new** Button("LogOut");

B9.setOnAction(action1->{

st.close();

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(B1, 0, 0);

gridPane1.add(B2, 2, 0);

gridPane1.add(B3, 0, 1);

gridPane1.add(B4, 2, 1);

gridPane1.add(B5, 0, 2);

gridPane1.add(B6, 2, 2);

gridPane1.add(B7, 0, 3);

gridPane1.add(B8, 2, 3);

gridPane1.add(B9, 1, 4);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st.setScene(scene1);

st.setTitle("Staff");

st.show();

}

**if**(ad\_sta==0) {

Stage st=**new** Stage();

Button B1=**new** Button("Add Book");

B1.setOnAction(action1 -> {

Stage st2=**new** Stage();

Label l1\_B1=**new** Label("Name");

TextField txt1\_B1=**new** TextField();

Label l2\_B1=**new** Label("Subject");

TextField txt2\_B1=**new** TextField();

Label l3\_B1=**new** Label("Price");

TextField txt3\_B1=**new** TextField();

Label l4\_B1=**new** Label("Edition");

TextField txt4\_B1=**new** TextField();

Label l5\_B1=**new** Label("Author");

TextField txt5\_B1=**new** TextField();

Button b\_B1=**new** Button("ADD");

b\_B1.setOnAction(action2->{

**try**{

String a,b,d,e,q;

a=txt1\_B1.getText();

b=txt2\_B1.getText();

q=txt3\_B1.getText();

d=txt4\_B1.getText();

e=txt5\_B1.getText();

//System.out.println(a+b+q+d+e);

String s="INSERT INTO Book(Book\_Name,Subject,Edition,Price,Author,Issued) VALUES('" + a +"'"+ ","+"'" + b+"'" + ","+ d + "," + q + "," +"'"+ e +"'"+ ",0)";

**int** c= *stmt*.executeUpdate(s);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B1, 0, 0);

gridPane1.add(txt1\_B1, 2, 0);

gridPane1.add(l2\_B1, 0, 1);

gridPane1.add(txt2\_B1, 2, 1);

gridPane1.add(l3\_B1, 0, 2);

gridPane1.add(txt3\_B1, 2, 2);

gridPane1.add(l4\_B1, 0, 3);

gridPane1.add(txt4\_B1, 2, 3);

gridPane1.add(l5\_B1, 0, 4);

gridPane1.add(txt5\_B1, 2, 4);

gridPane1.add(b\_B1, 1, 5);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("New Book Entry Form");

st2.show();

});

Button B2=**new** Button("Add User");

B2.setOnAction(action1->{

Stage st2=**new** Stage();

Label l1\_B7=**new** Label("Name");

TextField txt1\_B7=**new** TextField();

Label l2\_B7=**new** Label("Age");

TextField txt2\_B7=**new** TextField();

Label l3\_B7=**new** Label("PassWord");

TextField txt3\_B7=**new** TextField();

Text t\_B7=**new** Text();

Button b1\_B7=**new** Button("ADD");

b1\_B7.setOnAction(action2->{

String a,b,q;

a=txt1\_B7.getText();

b=txt2\_B7.getText();

q=txt3\_B7.getText();

**int** userid=-1;

String s="INSERT INTO User(User\_Name,Age,Book\_Count,Fine,PassKey) VALUES('"+a+"',"+b+",0,0,'"+q+ "')";

**try**{

**int** c=*stmt*.executeUpdate(s);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

s="SELECT \* FROM User WHERE User\_Name='"+a+"' AND Age="+b+" AND PassKey='"+q+"'";

**try**{

ResultSet rs=*stmt*.executeQuery(s);

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

userid=rs.getInt("U\_ID");

}

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

t\_B7.setText("User ID="+String.*valueOf*(userid));

st2.show();

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B7, 0, 0);

gridPane1.add(txt1\_B7, 2, 0);

gridPane1.add(l2\_B7, 0, 1);

gridPane1.add(txt2\_B7, 2, 1);

gridPane1.add(l3\_B7, 0, 2);

gridPane1.add(txt3\_B7, 2, 2);

gridPane1.add(b1\_B7, 1, 3);

gridPane1.add(t\_B7, 1, 4);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Add User");

st2.show();

});

Button B3=**new** Button("Edit Book Info");

B3.setOnAction(action2->{

Label l\_B3=**new** Label("Book ID");

TextField txt\_B3=**new** TextField();

Stage st2=**new** Stage();

Label l1\_B1=**new** Label("Name");

TextField txt1\_B1=**new** TextField();

txt1\_B1.setText("NULL");

Label l2\_B1=**new** Label("Subject");

TextField txt2\_B1=**new** TextField();

txt2\_B1.setText("NULL");

Label l3\_B1=**new** Label("Price");

TextField txt3\_B1=**new** TextField();

txt3\_B1.setText("NULL");

Label l4\_B1=**new** Label("Edition");

TextField txt4\_B1=**new** TextField();

txt4\_B1.setText("NULL");

Label l5\_B1=**new** Label("Author");

TextField txt5\_B1=**new** TextField();

txt5\_B1.setText("NULL");

Button b\_B1=**new** Button("UPDATE");

b\_B1.setOnAction(action3->{

String a,b,q,d,e1,j;

j=txt\_B3.getText();

a=txt1\_B1.getText();

b=txt2\_B1.getText();

q=txt3\_B1.getText();

d=txt4\_B1.getText();

e1=txt5\_B1.getText();

**if**(a.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Book\_Name = '"+a+"'"+ "WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(b.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Subject = '"+b+"'"+ "WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(q.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Price = "+q+ " WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(d.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Edition ="+d+ " WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**if**(e1.compareTo("NULL")!=0){

**try**{ String s="UPDATE Book SET Author = '"+e1+"'"+ "WHERE B\_ID ="+j;

**int** c=*stmt*.executeUpdate(s);}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B1, 0, 0);

gridPane1.add(txt1\_B1, 2, 0);

gridPane1.add(l2\_B1, 0, 1);

gridPane1.add(txt2\_B1, 2, 1);

gridPane1.add(l3\_B1, 0, 2);

gridPane1.add(txt3\_B1, 2, 2);

gridPane1.add(l4\_B1, 0, 3);

gridPane1.add(txt4\_B1, 2, 3);

gridPane1.add(l5\_B1, 0, 4);

gridPane1.add(txt5\_B1, 2, 4);

gridPane1.add(l\_B3, 0, 5);

gridPane1.add(txt\_B3, 2, 5);

gridPane1.add(b\_B1, 1, 6);

Text t1\_B3=**new** Text("Change NULL to New Values");

Text t2\_B3=**new** Text("If Field is Required to be Updated");

gridPane1.add(t1\_B3, 1, 7);

gridPane1.add(t2\_B3, 1, 8);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Edit Book Information Form");

st2.show();

});

Button B4=**new** Button("Issue Book");

B4.setOnAction(action1->{

Stage st2=**new** Stage();

Label l1\_B4=**new** Label("Book ID");

TextField txt1\_B4=**new** TextField();

Label l2\_B4=**new** Label("User ID");

TextField txt2\_B4=**new** TextField();

Text t\_B4=**new** Text();

Button b\_B4=**new** Button("ISSUE");

b\_B4.setOnAction(action2->{

String a=txt1\_B4.getText();

**int** isid=-1;

String h="SELECT Issued FROM Book WHERE B\_ID="+a;

**try**{

ResultSet rs=*stmt*.executeQuery(h);

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

isid=rs.getInt("Issued");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

**if**(isid==0){ SimpleDateFormat formatter = **new** SimpleDateFormat("dd/MM/yyyy");

Date date = **new** Date();

String s1=formatter.format(date);

String s2=*Func*(s1);

String b=txt2\_B4.getText();

String s="INSERT INTO Issued\_Books(U\_ID,B\_ID,Issue\_Date,Return\_Date) VALUES(" + b+ "," + a + ","+"'"+ s1+"'" + ",'" + s2 + "')";

String f="UPDATE Book SET Issued = 1 WHERE B\_ID ="+a;

**try**{

**int** c=*stmt*.executeUpdate(s);

**int** c1=*stmt*.executeUpdate(f);

}

**catch** (Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

**else** {

t\_B4.setText("Already Issued");

st2.show();

}

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B4, 0, 0);

gridPane1.add(txt1\_B4, 2, 0);

gridPane1.add(l2\_B4, 0, 1);

gridPane1.add(txt2\_B4, 2, 1);

gridPane1.add(b\_B4, 1, 2);

gridPane1.add(t\_B4, 1, 3);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Issue Book Form");

st2.show();

});

Button B5=**new** Button("Return Book");

B5.setOnAction(action1->{

Label l1\_B5=**new** Label("Issue ID");

TextField txt1\_B5=**new** TextField();

txt1\_B5.setText("NULL");

Text t1\_B5=**new** Text("OR");

Label l2\_B5=**new** Label("Book ID");

TextField txt2\_B5=**new** TextField();

txt2\_B5.setText("NULL");

Label l3\_B5=**new** Label("User ID");

TextField txt3\_B5=**new** TextField();

txt3\_B5.setText("NULL");

Button b\_B5=**new** Button("RETURN");

b\_B5.setOnAction(action2->{

SimpleDateFormat formatter = **new** SimpleDateFormat("dd/MM/yyyy");

Date date = **new** Date();

String s1=formatter.format(date);

String isid="",usid="",bkid="";

String a=txt1\_B5.getText();

String h="SELECT \* FROM Issued\_Books WHERE Issue\_ID="+a;

**try**{

ResultSet rs=*stmt*.executeQuery(h);

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

isid=rs.getString("Return\_Date");

usid=rs.getString("U\_ID");

bkid=rs.getString("B\_ID");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

**int** days=*Fun*(s1,isid);

**if**(days>0) {

**int** fine=5\*days;

**int** fine1=0;

String h1="SELECT Fine FROM User WHERE U\_ID="+usid;

**try**{

ResultSet rs=*stmt*.executeQuery(h1);

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

fine1=rs.getInt("Fine");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

fine=fine+fine1;

String fine\_s=String.*valueOf*(fine);

String s="UPDATE User SET Fine="+fine\_s+"WHERE U\_ID="+usid;

**try**{

**int** c=*stmt*.executeUpdate(s);

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

}

String s="UPDATE Book SET Issued=0 WHERE B\_ID="+bkid;

**try**{

**int** c=*stmt*.executeUpdate(s);

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

});

Stage st2=**new** Stage();

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B5, 0, 0);

gridPane1.add(txt1\_B5, 2, 0);

gridPane1.add(t1\_B5, 0, 1);

gridPane1.add(l2\_B5, 0, 2);

gridPane1.add(txt2\_B5, 2, 2);

gridPane1.add(l3\_B5, 0, 3);

gridPane1.add(txt3\_B5, 2, 3);

gridPane1.add(b\_B5, 1, 4);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Return Book Form");

st2.show();

});

Button B6=**new** Button("Collect Fine");

B6.setOnAction(action1->{

Label l1\_B6=**new** Label("User ID");

TextField txt1\_B6=**new** TextField();

Label l2\_B6=**new** Label("Amount Due");

TextField txt2\_B6=**new** TextField();

Label l3\_B6=**new** Label("Amount Paid");

TextField txt3\_B6=**new** TextField();

String a=txt1\_B6.getText();

**int** fine=0;

Button b1\_B6=**new** Button("Get Amount Due");

b1\_B6.setOnAction(action3->{

String h="SELECT \* FROM User WHERE U\_ID="+a;

**int** fine1=0;

**try**{

ResultSet rs=*stmt*.executeQuery(h);

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

fine1=rs.getInt("Fine");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

txt2\_B6.setText(String.*valueOf*(fine1));

});

Button b2\_B6=**new** Button("PAY");

b2\_B6.setOnAction(action3->{

String h="SELECT \* FROM User WHERE U\_ID="+a;

**int** fine1=0;

**try**{

ResultSet rs=*stmt*.executeQuery(h);

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

fine1=rs.getInt("Fine");

}

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

String b=txt3\_B6.getText();

**int** paid=Integer.*parseInt*(b);

fine1=fine1-paid;

b=String.*valueOf*(fine1);

String h1="UPDATE User SET Fine="+b+ "WHERE U\_ID="+a;

**try**{

**int** c=*stmt*.executeUpdate(h1);

}

**catch**(Exception e) {

System.***err***.println("Exception: "+e.getMessage());

}

});

Stage st2=**new** Stage();

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(l1\_B6, 0, 0);

gridPane1.add(txt1\_B6, 2, 0);

gridPane1.add(b1\_B6, 1, 1);

gridPane1.add(l2\_B6, 0, 2);

gridPane1.add(txt2\_B6, 2, 2);

gridPane1.add(b2\_B6, 1, 4);

gridPane1.add(l3\_B6, 0, 3);

gridPane1.add(txt3\_B6, 2, 3);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st2.setScene(scene1);

st2.setTitle("Fine Collection Form");

st2.show();

});

Button B7=**new** Button("LogOut");

B7.setOnAction(action1->{

st.close();

});

StackPane root1 = **new** StackPane();

GridPane gridPane1 = **new** GridPane();

gridPane1.setMinSize(400, 200);

gridPane1.setVgap(10);

gridPane1.setHgap(10);

gridPane1.setAlignment(Pos.***CENTER***);

gridPane1.add(B1, 0, 0);

gridPane1.add(B2, 2, 0);

gridPane1.add(B3, 0, 1);

gridPane1.add(B4, 2, 1);

gridPane1.add(B5, 0, 2);

gridPane1.add(B6, 2, 2);

gridPane1.add(B7, 1, 3);

root1.getChildren().add(gridPane1);

Scene scene1=**new** Scene(root1,400,400);

st.setScene(scene1);

st.setTitle("Staff");

st.show();

}

}

**else** {

t1.setText("Invalid Credentials");

st1.show();

}

});

GridPane gridPane = **new** GridPane();

gridPane.setMinSize(400, 200);

gridPane.setVgap(10);

gridPane.setHgap(10);

gridPane.setAlignment(Pos.***CENTER***);

gridPane.add(txt1, 1, 0);

gridPane.add(txt2, 1, 1);

gridPane.add(l1, 0, 0);

gridPane.add(l2, 0, 1);

gridPane.add(B, 0, 2);

gridPane.add(t1, 0, 3);

StackPane root = **new** StackPane();

root.getChildren().add(gridPane);

Scene scene=**new** Scene(root,400,400);

st1.setScene(scene);

st1.setTitle("Login Page");

st1.show();

}

}

}