

# **JAVA SWING BASED DISEASE SEVERITY TRACKER ON SOYABEAN SQL CONNECTIVITY USING JDBC**

A Report submitted in partial fulfillment of the requirements for the  
award of the Degree of

## **BACHELOR OF ENGINEERING IN INFORMATION TECHNOLOGY**

By

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**2021-22**

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**BONAFIDE CERTIFICATE**

This is to certify that this project report entitled

**“Disease severity tracker on Soyabean”**

being submitted by **V AJAY KUMAR SINGH**

bearing **1602-20-737-058** who carried out this  
project under my supervision in the IV semester  
for the academic year 2021-2022

**Signature**

**External Examiner**

**Signature**

**Internal Examiner**

# **ABSTRACT**

The Disease severity tracker on the crop soybean is a project designed with SQL and java. It helps farmers to identify the type of disease based on the symptoms of the soybean crop provided. They can observe the physical changes on the plants' leaves and surrounding and enter symptoms such as health, color, etc. It gives information about the disease that the crop is suffering.

## **REQUIREMENT ANALYSIS:**

### **LIST OF TABLES:**

Moisture

Diseases

Color

Spot Size

Location

### **LIST OF ATTRIBUTES WITH THEIR DOMAIN TYPES:**

#### **Moisture:**

moisture varchar2(20)

sid number(5)

#### **Location:**

lid number(5)

place varchar2(20)

#### **Diseases:**

name varchar2(40)

did number(5)

### Color:

color varchar2(40)

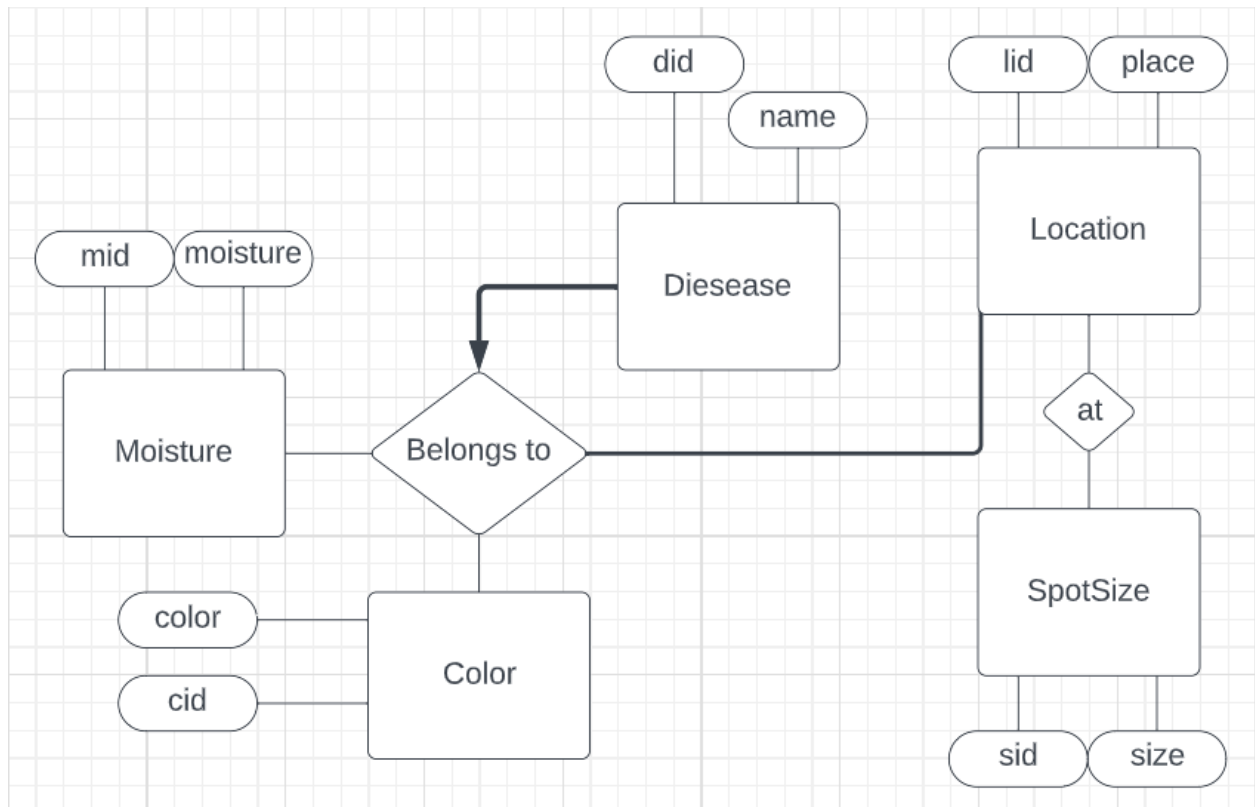
cid number(5)

### Spot Size:

size varchar2(40)

sid number(5)

### ER DIAGRAM:



## RELATIONAL MODEL:

### DDL OPERATIONS:

#### Deficiency:

```
create table deficiency(  
lcolor VARCHAR2(20),  
elem VARCHAR2(20),  
did NUMBER(5) PRIMARY KEY);
```

```
SQL> create table deficiency(  
2  lcolor VARCHAR2(20),  
3  elem VARCHAR2(20),  
4  did NUMBER(5) PRIMARY KEY);  
  
Table created.
```

```
SQL> desc deficiency  
Name                               Null?      Type  
-----  
LCOLOR                             VARCHA2(20)  
ELEM                               VARCHA2(20)  
DID                                NOT NULL  NUMBER(5)
```

#### Diseases:

```
create table diseases(  
scolor VARCHAR2(20),  
name VARCHAR2(20),  
sid NUMBER(5) REFERENCES deficiency(did));
```

```
SQL> create table diseases(  
2  scolor VARCHAR2(20),  
3  name VARCHAR2(20),  
4  sid NUMBER(5) REFERENCES deficiency(did));  
  
Table created.
```

```
SQL> desc diseases
```

Name	Null?	Type
SCOLOR		VARCHAR2(20)
NAME		VARCHAR2(40)
SID		NUMBER(5)

## Factors:

```
create table factors(  
fid NUMBER(5) PRIMARY KEY,  
factor VARCHAR2(30));
```

```
SQL> create table factors(  
2 fid NUMBER(5) PRIMARY KEY,  
3 factor VARCHAR2(30));
```

```
Table created.
```

```
SQL> desc factors
```

Name	Null?	Type
FID	NOT NULL	NUMBER(5)
FACTOR		VARCHAR2(30)

## Severity:

```
create table severity(  
did NUMBER(5) REFERENCES deficiency,  
fid NUMBER(5) REFERENCES factors,  
severity VARCHAR2(20));
```

```
SQL> create table severity(  
2 sid NUMBER(5) PRIMARY KEY,  
3 did NUMBER(5) REFERENCES deficiency,  
4 fid NUMBER(5) REFERENCES factors,  
5 severity VARCHAR2(20));
```

```
Table created.
```

```
SQL> desc severity
```

Name	Null?	Type
SID	NOT NULL	NUMBER(5)
DID		NUMBER(5)
FID		NUMBER(5)
SEVERITY		VARCHAR2(20)

## DML OPERATIONS:

### Deficiency:

insert into deficiency values('lcolor','elem',did);

```
SQL> INSERT INTO deficiency VALUES('Green','No deficiency',1);
1 row created.

SQL> INSERT INTO deficiency VALUES('Pale green','Nitrogen',2);
1 row created.

SQL> INSERT INTO deficiency VALUES('Dark green','Phosporous',3);
1 row created.

SQL> INSERT INTO deficiency VALUES('Yellow','Potassium',4);
1 row created.

SQL> INSERT INTO deficiency VALUES('Brown','Potassium',5);
1 row created.

SQL> INSERT INTO deficiency VALUES('Yellow','Sulphur',6);
1 row created.

SQL> INSERT INTO deficiency VALUES('Gray','Zinc',7);
1 row created.

SQL> INSERT INTO deficiency VALUES('Brown','Zinc',8);
1 row created.
```

```
SQL> select * from deficiency;
```

LCOLOR	ELEM	DID
Green	No deficiency	1
Pale green	Nitrogen	2
Dark green	Phosporous	3
Yellow	Potassium	4
Brown	Potassium	5
Yellow	Sulphur	6
Gray	Zinc	7
Brown	Zinc	8

```
8 rows selected.
```

## Diseases:

insert into diseases values('scolor','name',sid);

```
SQL> INSERT INTO diseases VALUES('Gray','Gray leaf spot',1);
```

```
1 row created.
```

```
SQL> INSERT INTO diseases VALUES('Grayish green','Northern corn leaf blight',1);
```

```
1 row created.
```

```
SQL> INSERT INTO diseases VALUES('Reddish Brown','Common rust',1);
```

```
1 row created.
```

```
SQL> INSERT INTO diseases VALUES('Orange','Southern rust',1);
```

```
1 row created.
```

```
SQL> INSERT INTO diseases VALUES('Light green','Eyespot',1);
```

```
1 row created.
```

```
SQL> INSERT INTO diseases VALUES('Black','Tar spot',1);
```

```
1 row created.
```



```
SQL> select * from diseases;
```

SCOLOR	NAME	SID
Gray	Gray leaf spot	1
Grayish green	Northern corn leaf blight	1
Reddish Brown	Common rust	1
Orange	Southern rust	1
Light green	Eyespot	1
Black	Tar spot	1

```
6 rows selected.
```

## Factors:

insert into factors values(fid,'factor');

```
SQL> INSERT INTO factors VALUES(100,'No external factors');
```

```
1 row created.
```

```
SQL> INSERT INTO factors VALUES(101,'Cloudy climate');
```

```
1 row created.
```

```
SQL> INSERT INTO factors VALUES(102,'Temperature stress');
```

```
1 row created.
```

```
SQL> INSERT INTO factors VALUES(103,'Hail Damage');
```

```
1 row created.
```

```
SQL> INSERT INTO factors VALUES(104,'Insect Damage');
```

```
1 row created.
```

```
SQL> select * from factors;
```

FID	FACTOR
100	No external factors
101	Cloudy climate
102	Temperature stress
103	Hail Damage
104	Insect Damage

## Severity:

insert into severity values(did,fid,'severe');

```
SQL> insert into severity values(1,1,100,'Low');
1 row created.

SQL> insert into severity values(2,1,101,'High');
1 row created.

SQL> insert into severity values(3,1,102,'High');
1 row created.

SQL> insert into severity values(4,1,103,'Moderate');
1 row created.

SQL> insert into severity values(5,1,104,'Moderate');
1 row created.
```

```
SQL> insert into severity values(6,2,100,'Low');
1 row created.

SQL> insert into severity values(7,2,101,'High');
1 row created.

SQL> insert into severity values(8,2,102,'High');
1 row created.

SQL> insert into severity values(9,2,103,'Moderate');
1 row created.

SQL> insert into severity values(10,2,104,'Moderate');
1 row created.

SQL> insert into severity values(11,3,100,'Low');
1 row created.

SQL> insert into severity values(12,3,101,'High');
1 row created.

SQL> insert into severity values(13,3,102,'High');
1 row created.

SQL> insert into severity values(14,3,103,'Moderate');
1 row created.

SQL> insert into severity values(15,3,104,'Moderate');
1 row created.
```

SID	DID	FID	SEVERITY
1	1	100	Low
2	1	101	High
3	1	102	High
4	1	103	Moderate
5	1	104	Moderate
6	2	100	Low
7	2	101	High
8	2	102	High
9	2	103	Moderate
10	2	104	Moderate
11	3	100	Low
12	3	101	High
13	3	102	High
14	3	103	Moderate
15	3	104	Moderate
16	4	100	Low
17	4	101	High
18	4	102	High
19	4	103	Moderate
20	4	104	Moderate
21	5	100	Low
22	5	101	High
23	5	102	High
24	5	103	Moderate
25	5	104	Moderate
26	6	100	Low
27	6	101	High
28	6	102	High
29	6	103	Moderate
30	6	104	Moderate
31	7	100	Low

32	7	101	High
33	7	102	High
SID	DID	FID	SEVERITY
34	7	103	Moderate
35	7	104	Moderate
36	8	100	Low
37	8	101	High
38	8	102	High
39	8	103	Moderate
40	8	104	Moderate

40 rows selected.

## Front End Implementation:

Java SWING is a GUI widget toolkit for Java. It is part of Oracle's Java Foundation Classes (JFC) - an API for providing a graphical user interface (GUI) for Java programs. Swing was developed to provide a more sophisticated set of GUI components than the earlier AWT. Swing provides a look and feel that emulates the look and feel of several platforms and supports a pluggable look and feel that allows applications to have a look and feel unrelated to the underlying platform. It has more powerful and flexible components than AWT. In addition to familiar components such as buttons, check boxes and labels, Swing provides several advanced components such as tabbed panel, scroll panes, trees, tables, and lists.

## Code:

```
//HomePage1.java
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;

public class HomePage1 extends JFrame{
    private JFrame frame= new JFrame();
    private JMenuBar mBar;
    private JMenu mnuHelp,insert,delete,update;
    private JMenuItem
    abt,defsins,disins,facins,sevins,defdel,disdel,facdel,sevdel,defup,disup,facup,sevup;

    public HomePage1(){
        frame.setTitle("Home Page");
        frame.setLayout(null);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```

frame.setBounds(100,150,600,350);
    Container c=frame.getContentPane();
    initializeMenuBar();
frame.setJMenuBar(mBar);
    abt.addActionListener(new HelpMenuActionListener());
    defins.addActionListener(new HelpMenuActionListener());
    disins.addActionListener(new HelpMenuActionListener());
    facins.addActionListener(new HelpMenuActionListener());
    sevins.addActionListener(new HelpMenuActionListener());
    defdel.addActionListener(new HelpMenuActionListener());
    disdel.addActionListener(new HelpMenuActionListener());
    facdel.addActionListener(new HelpMenuActionListener());
    sevdel.addActionListener(new HelpMenuActionListener());
    defup.addActionListener(new HelpMenuActionListener());
    disup.addActionListener(new HelpMenuActionListener());
    facup.addActionListener(new HelpMenuActionListener());
    sevup.addActionListener(new HelpMenuActionListener());
    JLabel label=new JLabel("DISEASE SEVERITY TRACKER ON MAIZE HOME PAGE");
    JLabel label1=new JLabel();
    label1.setIcon(new ImageIcon("C:/Users/sasid/Downloads/maize.jpg"));
    Dimension size = label1.getPreferredSize();
    label.setBounds(50,5,700,50);

    label.setFont(new Font("Serif",Font.PLAIN,20));

    label.setForeground(Color.BLUE);
    label1.setBounds(160,60, size.width,size.height);

    c.add(label);
    c.add(label1);

    frame.getContentPane().setBackground(Color.CYAN);

    frame.setVisible(true);
}

public void initializeMenuBar()
{

```

```

mBar=new JMenuBar();
mnuHelp=new JMenu("Help");
insert=new JMenu("Insert");
delete=new JMenu("Delete");
update=new JMenu("Update");
abt=new JMenuItem("About");
defins=new JMenuItem("Deficiency");
disins=new JMenuItem("Diseases");
facins=new JMenuItem("Factors");
sevins=new JMenuItem("Severity");
defdel=new JMenuItem("Deficiency");
disdel=new JMenuItem("Diseases");
facdel=new JMenuItem("Factors");
sevdel=new JMenuItem("Severity");
defup=new JMenuItem("Deficiency");
disup=new JMenuItem("Diseases");
facup=new JMenuItem("Factors");
sevup=new JMenuItem("Severity");
mnuHelp.add(abt);
insert.add(defins);
insert.add(disins);
insert.add(facins);
insert.add(sevins);
delete.add(defdel);
delete.add(disdel);
delete.add(facdel);
delete.add(sevdel);
update.add(defup);
update.add(disup);
update.add(facup);
update.add(sevup);
mBar.add(mnuHelp);
mBar.add(insert);
mBar.add(delete);
mBar.add(update);
}

```

```

private class HelpMenuActionListener implements ActionListener {
    public void actionPerformed(ActionEvent ae) {
        if(ae.getSource()==abt)
        {

```

```

        String details;
        details = "This project is about tracking the severity of the disease
on maize crop"+"\\n"+
        "It has 4 tables:"+"\\n"+
        "1.Deficiency table with rows containing deficiency Id as did,deficient element as
elem and leaf colour as lcolor"+"\\n"+
        "2.Diseases table with rows containing disease Id as did,name of the disease as
name and colour as scolor"+"\\n"+
        "3.Factors table with rows containing factor Id as fid and factor as factor"+"\\n"+
        "4.Severity table with rows containing severity Id as sid, deficiency Id as
did,factor Id as fid and severity as severity";
        JOptionPane.showMessageDialog(null,details,"INFORMATION",
JOptionPane.INFORMATION_MESSAGE);
    }
    else if(ae.getSource()==defins){
        new insertdeficiency();
    }
    else if(ae.getSource()==disins){
        new insertdiseases();
    }
    else if(ae.getSource()==facins){
        new insertfactors();
    }
    else if(ae.getSource()==sevins){
        new insertseverity();
    }
    else if(ae.getSource()==defdel){
        new deletedeficiency();
    }
    else if(ae.getSource()==disdel){
        new deletediseases();
    }
    else if(ae.getSource()==facdel){
        new deletefactors();
    }
    else if(ae.getSource()==sevdel){
        new deleteseverity();
    }
    else if(ae.getSource()==defup){
        new updatedeficiency();
    }
}

```

```

        else if(ae.getSource()==disup){
            new updatediseases();
        }
        else if(ae.getSource()==facup){
            new updatefactors();
        }
        else if(ae.getSource()==sevup){
            new updateseverity();
        }
    }
}

```

```

    public static void main(String args[]){
        new HomePage1();
    }
}

```

```

//insertdeficiency.java
import javax.swing.*.*;
import java.awt.*.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class insertdeficiency implements ActionListener{
    private JFrame f=new JFrame("Insertions");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Deficiency ID");
    private JLabel l2=new JLabel("Enter Deficient Color");
    private JLabel l3=new JLabel("Enter Deficient Element");
    private JLabel l4=new JLabel("Result");
    private JButton b1=new JButton("Insert");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextField t3=new JTextField();
    private JTextField t4=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public insertdeficiency() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
    }
}

```



```

        f.setBounds(300,200,720,300);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(l3);
        f.getContentPane().add(l4);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        f.getContentPane().add(t3);
        f.getContentPane().add(t4);
        l.setBounds(20,30,50,50);
        l1.setBounds(20,20,150,30);
        l1.setOpaque(true);
        l1.setBackground(Color.PINK);
        l2.setBounds(20,60,150,30);
        l2.setOpaque(true);
        l2.setBackground(Color.PINK);
        l3.setBounds(20,100,150,30);
        l3.setOpaque(true);
        l3.setBackground(Color.PINK);
        l4.setBounds(20,140,150,30);
        l4.setOpaque(true);
        l4.setBackground(Color.PINK);
        b1.setBounds(160,200,100,30);
        b1.setFont(new Font("Times New Roman",Font.BOLD,17));
        t1.setBounds(170,20,220,30);
        t2.setBounds(170,60,220,30);
        t3.setBounds(170,100,220,30);
        t4.setBounds(170,140,220,30);
        b1.addActionListener(this);
        c.add(l);
        f.getContentPane().setBackground(Color.PINK);
        t.setEditable(false);
        f.setVisible(true);
    }

    public void actionPerformed(ActionEvent ae){
        String s=new String(ae.getActionCommand());
        if((s).equals("Insert")){

```

```

        try{
            t4.setText("Row Inserted");
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
            Statement stmt=con.createStatement();
            int did=Integer.parseInt(t1.getText());
            String lcolor=t2.getText();
            String elem=t3.getText();
            stmt.executeUpdate("insert into deficiency
values('"+lcolor+"','"+elem+"','"+did+"')");
            ResultSet rs=stmt.executeQuery("select * from deficiency");
            String str=new String();
            while(rs.next())
                str=str+(rs.getString(1)+" "+rs.getString(2)+"
"+rs.getInt(3)+"\n");

            t.setText(str);
            con.commit();
            con.close();
        }
        catch (Exception e) {
            t4.setText("Error Occured!!");
        }
    }
}

public static void main(String[] args){
    new insertdeficiency();
}
}

```

```

//insertdiseases.java
import javax.swing.*.*;
import java.awt.*.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;

public class insertdiseases implements ActionListener{
    private JFrame f=new JFrame("Insertions");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter leaf Color");
    private JLabel l2=new JLabel("Enter disease name");

```

```

private JLabel l3=new JLabel("Result");
private JButton b1=new JButton("Insert");
private JTextField t1=new JTextField();
private JTextField t2=new JTextField();
private JTextField t3=new JTextField();
private JTextArea t=new JTextArea();
private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
public insertdiseases() {
    f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
    f.setBounds(300,200,720,300);
    Container c=f.getContentPane();
    f.getContentPane().add(l1);
    f.getContentPane().add(l2);
    f.getContentPane().add(l3);
    f.getContentPane().add(scrollBar);
    scrollBar.setBounds(420,20,250,150);
    f.getContentPane().add(b1);
    f.getContentPane().add(t1);
    f.getContentPane().add(t2);
    f.getContentPane().add(t3);
    l.setBounds(20,30,50,50);
    l1.setBounds(20,20,150,30);
    l1.setOpaque(true);
    l1.setBackground(Color.PINK);
    l2.setBounds(20,60,150,30);
    l2.setOpaque(true);
    l2.setBackground(Color.PINK);
    l3.setBounds(20,100,150,30);
    l3.setOpaque(true);
    l3.setBackground(Color.PINK);
    b1.setBounds(160,180,100,30);
    b1.setFont(new Font("Times New Roman",Font.BOLD,17));
    t1.setBounds(170,20,220,30);
    t2.setBounds(170,60,220,30);
    t3.setBounds(170,100,220,30);
    b1.addActionListener(this);
    c.add(l);
    f.getContentPane().setBackground(Color.PINK);
    t.setEditable(false);

```

```

        f.setVisible(true);
    }
    public void actionPerformed(ActionEvent ae){
        String s=new String(ae.getActionCommand());
        if((s).equals("Insert")){
            try{
                t3.setText("Row Inserted");
                Class.forName("oracle.jdbc.OracleDriver");
                Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
                Statement stmt=con.createStatement();
                String scolor=t1.getText();
                String name=t2.getText();
                stmt.executeUpdate("insert into diseases
values('"+scolor+"','"+name+"','"+1+"')");
                ResultSet rs=stmt.executeQuery("select * from diseases");
                String str=new String();
                while(rs.next())
                    str=str+(rs.getString(1)+" "+rs.getString(2)+"
"+rs.getInt(3)+"\n");
                t.setText(str);
                stmt.executeUpdate("insert into diseases
values('"+scolor+"','"+name+"','"+1+"')");
                con.commit();
                con.close();
            }
            catch (Exception e) {
                t3.setText("Error Occured!!");
            }
        }
    }
    public static void main(String[] args){
        new insertdiseases();
    }
}

```

```

//insertfactors.java
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;

```

```

import java.util.*;
public class insertfactors implements ActionListener{
    private JFrame f=new JFrame("Insertions");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Factor ID");
    private JLabel l2=new JLabel("Enter Factor");
    private JLabel l3=new JLabel("Result");
    private JButton b1=new JButton("Insert");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextField t3=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public insertfactors() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,300);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(l3);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        f.getContentPane().add(t3);
        l.setBounds(20,30,50,50);
        l1.setBounds(20,20,150,30);
        l1.setOpaque(true);
        l1.setBackground(Color.PINK);
        l2.setBounds(20,60,150,30);
        l2.setOpaque(true);
        l2.setBackground(Color.PINK);
        l3.setBounds(20,100,150,30);
        l3.setOpaque(true);
        l3.setBackground(Color.PINK);
        b1.setBounds(160,180,100,30);
        b1.setFont(new Font("Times New Roman",Font.BOLD,17));
        t1.setBounds(170,20,220,30);

```

```

        t2.setBounds(170,60,220,30);
        t3.setBounds(170,100,220,30);
        b1.addActionListener(this);
        c.add(l);
        f.getContentPane().setBackground(Color.PINK);
        t.setEditable(false);
        f.setVisible(true);
    }
    public void actionPerformed(ActionEvent ae){
        String s=new String(ae.getActionCommand());
        if((s).equals("Insert")){
            try{
                t3.setText("Row Inserted");
                Class.forName("oracle.jdbc.OracleDriver");
                Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
                Statement stmt=con.createStatement();
                int fid=Integer.parseInt(t1.getText());
                String factor=t2.getText();
                stmt.executeUpdate("insert into factors
values("+fid+", '"+factor+"'");
                ResultSet rs=stmt.executeQuery("select * from factors");
                String str=new String();
                while(rs.next())
                    str=str+(rs.getInt(1)+" " +rs.getString(2)+"\n");
                t.setText(str);
                con.commit();
                con.close();
            }
            catch (Exception e) {
                t3.setText("Error Occured!!");
            }
        }
    }
    public static void main(String[] args){
        new insertfactors();
    }
}

```

```

//insertseverity.java
import javax.swing.*;

```

```

import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class insertseverity implements ActionListener{
    private JFrame f=new JFrame("Insertions");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Severity ID");
    private JLabel l2=new JLabel("Enter Did");
    private JLabel l3=new JLabel("Enter Fid");
    private JLabel l4=new JLabel("Enter Severity");
    private JLabel l5=new JLabel("Result");
    private JButton b1=new JButton("Insert");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextField t3=new JTextField();
    private JTextField t4=new JTextField();
    private JTextField t5=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public insertseverity() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,300);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(l3);
        f.getContentPane().add(l4);
        f.getContentPane().add(l5);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        f.getContentPane().add(t3);
        f.getContentPane().add(t4);
        f.getContentPane().add(t5);
        l.setBounds(20,30,50,50);
        l1.setBounds(20,20,150,30);

```

```

l1.setOpaque(true);
l1.setBackground(Color.PINK);
l2.setBounds(20,60,150,30);
l2.setOpaque(true);
l2.setBackground(Color.PINK);
l3.setBounds(20,100,150,30);
l3.setOpaque(true);
l3.setBackground(Color.PINK);
l4.setBounds(20,140,150,30);
l4.setOpaque(true);
l4.setBackground(Color.PINK);
l5.setBounds(20,180,150,30);
l5.setOpaque(true);
l5.setBackground(Color.PINK);
b1.setBounds(480,180,100,30);
b1.setFont(new Font("Times New Roman",Font.BOLD,17));
t1.setBounds(170,20,220,30);
t2.setBounds(170,60,220,30);
t3.setBounds(170,100,220,30);
t4.setBounds(170,140,220,30);
t5.setBounds(170,180,220,30);
b1.addActionListener(this);
c.add(l);
f.getContentPane().setBackground(Color.PINK);
t.setEditable(false);
f.setVisible(true);
}
public void actionPerformed(ActionEvent ae){
    String s=new String(ae.getActionCommand());
    if((s).equals("Insert")){
        try{
            t5.setText("Row Inserted");
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
            Statement stmt=con.createStatement();
            int sid=Integer.parseInt(t1.getText());
            int did=Integer.parseInt(t2.getText());
            int fid=Integer.parseInt(t3.getText());
            String severity=t4.getText();

```



```

        stmt.executeUpdate("insert into severity
values("+sid+", "+did+", "+fid+", "+severity+"");
        ResultSet rs=stmt.executeQuery("select * from severity");
        String str=new String();
        while(rs.next())
            str=str+(rs.getInt(1)+" "+rs.getInt(2)+" "+rs.getInt(3)+"
"+rs.getString(4)+"\n");
        t.setText(str);
        con.commit();
        con.close();
    }
    catch (Exception e) {
        t5.setText("Error Occured!!");
    }
}
}
public static void main(String[] args){
    new insertseverity();
}
}

```

//deletedeficiency.java

```

import javax.swing.*.*;
import java.awt.*.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;

public class deletedeficiency implements ActionListener{
    private JFrame f=new JFrame("Deletions");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Deficiency ID");
    private JLabel l2=new JLabel("Result");
    private JButton b1=new JButton("Delete");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public deletedeficiency() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
    }
}

```

```

f.setBounds(300,200,720,250);
Container c=f.getContentPane();
f.getContentPane().add(l1);
f.getContentPane().add(l2);
f.getContentPane().add(scrollBar);
scrollBar.setBounds(420,20,250,150);
f.getContentPane().add(b1);
f.getContentPane().add(t1);
f.getContentPane().add(t2);
l.setBounds(20,30,50,50);
l1.setBounds(20,20,150,30);
l1.setOpaque(true);
l1.setBackground(Color.PINK);
l2.setBounds(20,60,150,30);
l2.setOpaque(true);
l2.setBackground(Color.PINK);
b1.setBounds(160,120,100,30);
b1.setFont(new Font("Times New Roman",Font.BOLD,17));
t1.setBounds(170,20,220,30);
t2.setBounds(170,60,220,30);
b1.addActionListener(this);
c.add(l);
f.getContentPane().setBackground(Color.PINK);
t.setEditable(false);
f.setVisible(true);
}

public void actionPerformed(ActionEvent ae){
    String s=new String(ae.getActionCommand());
    if((s.equals("Delete"))){
        try{
            t2.setText("Row Deleted");
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
            Statement stmt=con.createStatement();
            int did=Integer.parseInt(t1.getText());
            stmt.executeUpdate("delete from deficiency where did="+did+"");
            ResultSet rs=stmt.executeQuery("select * from deficiency");
            String str=new String();
            while(rs.next())

```

```

                                str=str+(rs.getString(1)+" "+rs.getString(2)+"
"+rs.getInt(3)+"\n");
                                t.setText(str);
                                con.commit();
                                con.close();
                        }
                        catch (Exception e) {
                                t2.setText("Error Occured!!!");
                        }
                }
        }
        public static void main(String[] args){
                new deletedeficiency();
        }
}

```

//deletediseases.java

```

import javax.swing.*.*;
import java.awt.*.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class deletediseases implements ActionListener{
        private JFrame f=new JFrame("Deletions");
        private JLabel l=new JLabel("");
        private JLabel l1=new JLabel("Enter Disease name");
        private JLabel l2=new JLabel("Result");
        private JButton b1=new JButton("Delete");
        private JTextField t1=new JTextField();
        private JTextField t2=new JTextField();
        private JTextArea t=new JTextArea();
        private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
        public deletediseases() {
                f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
                f.setBounds(300,200,720,250);
                Container c=f.getContentPane();
                f.getContentPane().add(l1);
                f.getContentPane().add(l2);
                f.getContentPane().add(scrollBar);
        }
}

```

```

scrollBar.setBounds(420,20,250,150);
f.getContentPane().add(b1);
f.getContentPane().add(t1);
f.getContentPane().add(t2);
l.setBounds(20,30,50,50);
l1.setBounds(20,20,150,30);
l1.setOpaque(true);
l1.setBackground(Color.PINK);
l2.setBounds(20,60,150,30);
l2.setOpaque(true);
l2.setBackground(Color.PINK);
b1.setBounds(160,120,100,30);
b1.setFont(new Font("Times New Roman",Font.BOLD,17));
t1.setBounds(170,20,220,30);
t2.setBounds(170,60,220,30);
b1.addActionListener(this);
c.add(l);
f.getContentPane().setBackground(Color.PINK);
t.setEditable(false);
f.setVisible(true);
}
public void actionPerformed(ActionEvent ae){
    String s=new String(ae.getActionCommand());
    if((s.equals("Delete"))){
        try{
            t2.setText("Row Deleted");
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
            Statement stmt=con.createStatement();
            String name=t1.getText();
            stmt.executeUpdate("delete from diseases where
name='"+name+"'");
            ResultSet rs=stmt.executeQuery("select * from diseases");
            String str=new String();
            while(rs.next())
                str=str+(rs.getString(1)+" "+rs.getString(2)+"
"+rs.getInt(3)+"\n");
            t.setText(str);
            con.commit();
            con.close();

```

```

    }
    catch (Exception e) {
        t2.setText("Error Occured!!");
    }
}
}
public static void main(String[] args){
    new deletediseases();
}
}

```

//deletefactors.java

```

import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class deletefactors implements ActionListener{
    private JFrame f=new JFrame("Deletions");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Factor ID");
    private JLabel l2=new JLabel("Result");
    private JButton b1=new JButton("Delete");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public deletefactors() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,250);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        l.setBounds(20,30,50,50);
    }
}

```

```

l1.setBounds(20,20,150,30);
l1.setOpaque(true);
l1.setBackground(Color.PINK);
l2.setBounds(20,60,150,30);
l2.setOpaque(true);
l2.setBackground(Color.PINK);
b1.setBounds(160,120,100,30);
b1.setFont(new Font("Times New Roman",Font.BOLD,17));
t1.setBounds(170,20,220,30);
t2.setBounds(170,60,220,30);
b1.addActionListener(this);
c.add(l);
f.getContentPane().setBackground(Color.PINK);
t.setEditable(false);
f.setVisible(true);
}
public void actionPerformed(ActionEvent ae){
    String s=new String(ae.getActionCommand());
    if((s).equals("Delete")){
        try{
            t2.setText("Row Deleted");
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
            Statement stmt=con.createStatement();
            int fid=Integer.parseInt(t1.getText());
            stmt.executeUpdate("delete from factors where fid="+fid+"");
            ResultSet rs=stmt.executeQuery("select * from factors");
            String str=new String();
            while(rs.next())
                str=str+(rs.getInt(1)+" " +rs.getString(2)+"\n");
            t.setText(str);
            con.commit();
            con.close();
        }
        catch (Exception e) {
            t2.setText("Error Occured!!!");
        }
    }
}
public static void main(String[] args){

```

```

        new deletefactors();
    }
}

//deleteseverity.java
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;

public class deleteseverity implements ActionListener{
    private JFrame f=new JFrame("Deletions");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Severity");
    private JLabel l2=new JLabel("Result");
    private JButton b1=new JButton("Delete");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);

    public deleteseverity() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,250);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        l.setBounds(20,30,50,50);
        l1.setBounds(20,20,150,30);
        l1.setOpaque(true);
        l1.setBackground(Color.PINK);
        l2.setBounds(20,60,150,30);
        l2.setOpaque(true);
        l2.setBackground(Color.PINK);
        b1.setBounds(160,120,100,30);
    }
}

```

```

        b1.setFont(new Font("Times New Roman",Font.BOLD,17));
        t1.setBounds(170,20,220,30);
        t2.setBounds(170,60,220,30);
        b1.addActionListener(this);
        c.add(l);
        f.getContentPane().setBackground(Color.PINK);
        t.setEditable(false);
        f.setVisible(true);
    }
    public void actionPerformed(ActionEvent ae){
        String s=new String(ae.getActionCommand());
        if((s).equals("Delete")){
            try{
                t2.setText("Row Deleted");
                Class.forName("oracle.jdbc.OracleDriver");
                Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
                Statement stmt=con.createStatement();
                int sid=Integer.parseInt(t1.getText());
                stmt.executeUpdate("delete from severity where sid="+sid+"");
                ResultSet rs=stmt.executeQuery("select * from severity");
                String str=new String();
                while(rs.next())
                    str=str+(rs.getInt(1)+" "+rs.getInt(2)+" "+rs.getInt(3)+"
"+rs.getString(4)+"\n");
                t.setText(str);
                con.commit();
                con.close();
            }
            catch (Exception e) {
                t2.setText("Error Occured!!");
            }
        }
    }
    public static void main(String[] args){
        new deleteseverity();
    }
}

```

```

//updatedeficiency.java
import javax.swing.*;

```



```

import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class updatedeficiency implements ActionListener{
    private JFrame f=new JFrame("Updations");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Deficiency ID");
    private JLabel l2=new JLabel("Enter Deficient Element");
    private JLabel l3=new JLabel("Result");
    private JButton b1=new JButton("Update");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextField t3=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public updatedeficiency() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,300);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(l3);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        f.getContentPane().add(t3);
        l.setBounds(20,30,50,50);
        l1.setBounds(20,20,150,30);
        l1.setOpaque(true);
        l1.setBackground(Color.PINK);
        l2.setBounds(20,60,150,30);
        l2.setOpaque(true);
        l2.setBackground(Color.PINK);
        l3.setBounds(20,100,150,30);
        l3.setOpaque(true);
        l3.setBackground(Color.PINK);
    }
}

```

```

        b1.setBounds(160,180,100,30);
        b1.setFont(new Font("Times New Roman",Font.BOLD,17));
        t1.setBounds(170,20,220,30);
        t2.setBounds(170,60,220,30);
        t3.setBounds(170,100,220,30);
        b1.addActionListener(this);
        c.add(l);
        f.getContentPane().setBackground(Color.PINK);
        t.setEditable(false);
        f.setVisible(true);
    }
    public void actionPerformed(ActionEvent ae){
        String s=new String(ae.getActionCommand());
        if((s.equals("Update"))){
            try{
                t3.setText("Row Updated");
                Class.forName("oracle.jdbc.OracleDriver");
                Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
                Statement stmt=con.createStatement();
                int did=Integer.parseInt(t1.getText());
                String elem=t2.getText();
                stmt.executeUpdate("Update deficiency set elem='"+elem+"
where did="+did+"'");

                ResultSet rs=stmt.executeQuery("select * from deficiency");
                String str=new String();
                while(rs.next())
                    str=str+(rs.getString(1)+" "+rs.getString(2)+"
"+rs.getInt(3)+"\n");

                t.setText(str);
                con.commit();
                con.close();
            }
            catch (Exception e) {
                t3.setText("Error Occured!!");
            }
        }
    }
    public static void main(String[] args){
        new updatedeficiency();
    }

```

```

}
//updatediseases.java
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class updatediseases implements ActionListener{
    private JFrame f=new JFrame("Updates");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter leaf Color");
    private JLabel l2=new JLabel("Enter disease name");
    private JLabel l3=new JLabel("Result");
    private JButton b1=new JButton("Update");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextField t3=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public updatediseases() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,300);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(l3);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        f.getContentPane().add(t3);
        l.setBounds(20,30,50,50);
        l1.setBounds(20,20,150,30);
        l1.setOpaque(true);
        l1.setBackground(Color.PINK);
        l2.setBounds(20,60,150,30);
        l2.setOpaque(true);
        l2.setBackground(Color.PINK);

```

```

l3.setBounds(20,100,150,30);
l3.setOpaque(true);
l3.setBackground(Color.PINK);
b1.setBounds(160,180,100,30);
b1.setFont(new Font("Times New Roman",Font.BOLD,17));
t1.setBounds(170,20,220,30);
t2.setBounds(170,60,220,30);
t3.setBounds(170,100,220,30);
b1.addActionListener(this);
c.add(l);
f.getContentPane().setBackground(Color.PINK);
t.setEditable(false);
f.setVisible(true);
}
public void actionPerformed(ActionEvent ae){
    String s=new String(ae.getActionCommand());
    if((s).equals("Update")){
        try{
            t3.setText("Row Updated");
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
            Statement stmt=con.createStatement();
            String scolor=t1.getText();
            String name=t2.getText();
            stmt.executeUpdate("Update diseases set name='"+name+"
where scolor='"+scolor+"'");
            ResultSet rs=stmt.executeQuery("select * from diseases");
            String str=new String();
            while(rs.next())
                str=str+(rs.getString(1)+" "+rs.getString(2)+"
"+rs.getInt(3)+"\n");
            t.setText(str);
            stmt.executeUpdate("insert into diseases
values('"+scolor+"','"+name+"','"+1+"')");
            con.commit();
            con.close();
        }
        catch (Exception e) {
            t3.setText("Error Occured!!!");
        }
    }
}

```

```

    }
}
public static void main(String[] args){
    new updatediseases();
}
}

```

```

//updatefactors.java
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class updatefactors implements ActionListener{
    private JFrame f=new JFrame("Updatations");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Factor ID");
    private JLabel l2=new JLabel("Enter Factor");
    private JLabel l3=new JLabel("Result");
    private JButton b1=new JButton("Update");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextField t3=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public updatefactors() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,300);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(l3);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        f.getContentPane().add(t3);
    }
}

```

```

l.setBounds(20,30,50,50);
l1.setBounds(20,20,150,30);
l1.setOpaque(true);
l1.setBackground(Color.PINK);
l2.setBounds(20,60,150,30);
l2.setOpaque(true);
l2.setBackground(Color.PINK);
l3.setBounds(20,100,150,30);
l3.setOpaque(true);
l3.setBackground(Color.PINK);
b1.setBounds(160,180,100,30);
b1.setFont(new Font("Times New Roman",Font.BOLD,17));
t1.setBounds(170,20,220,30);
t2.setBounds(170,60,220,30);
t3.setBounds(170,100,220,30);
b1.addActionListener(this);
c.add(l);
f.getContentPane().setBackground(Color.PINK);
t.setEditable(false);
f.setVisible(true);
}
public void actionPerformed(ActionEvent ae){
    String s=new String(ae.getActionCommand());
    if((s.equals("Update"))){
        try{
            t3.setText("Row Updated");
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
            Statement stmt=con.createStatement();
            int fid=Integer.parseInt(t1.getText());
            String factor=t2.getText();
            stmt.executeUpdate("Update factors set factor='"+factor+"' where
fid='"+fid+"'");

            ResultSet rs=stmt.executeQuery("select * from factors");
            String str=new String();
            while(rs.next())
                str=str+(rs.getInt(1)+" "+rs.getString(2)+"\n");
            t.setText(str);
            con.commit();
            con.close();

```

```

    }
    catch (Exception e) {
        t3.setText("Error Occured!!");
    }
}
}
public static void main(String[] args){
    new updatefactors();
}
}

```

//updateseverity.java

```

import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.*;
public class updateseverity implements ActionListener{
    private JFrame f=new JFrame("Updatations");
    private JLabel l=new JLabel("");
    private JLabel l1=new JLabel("Enter Severity ID");
    private JLabel l2=new JLabel("Enter Severity");
    private JLabel l3=new JLabel("Result");
    private JButton b1=new JButton("Update");
    private JTextField t1=new JTextField();
    private JTextField t2=new JTextField();
    private JTextField t3=new JTextField();
    private JTextArea t=new JTextArea();
    private JScrollPane scrollBar=new
JScrollPane(t,JScrollPane.VERTICAL_SCROLLBAR_ALWAYS,JScrollPane.HORIZONTAL_SCROLLBAR_
ALWAYS);
    public updateseverity() {
        f.setDefaultCloseOperation(JFrame.HIDE_ON_CLOSE);
        f.setBounds(300,200,720,300);
        Container c=f.getContentPane();
        f.getContentPane().add(l1);
        f.getContentPane().add(l2);
        f.getContentPane().add(l3);
        f.getContentPane().add(scrollBar);
        scrollBar.setBounds(420,20,250,150);
        f.getContentPane().add(b1);
    }
}

```

```

        f.getContentPane().add(t1);
        f.getContentPane().add(t2);
        f.getContentPane().add(t3);
        l.setBounds(20,30,50,50);
        l1.setBounds(20,20,150,30);
        l1.setOpaque(true);
        l1.setBackground(Color.PINK);
        l2.setBounds(20,60,150,30);
        l2.setOpaque(true);
        l2.setBackground(Color.PINK);
        l3.setBounds(20,100,150,30);
        l3.setOpaque(true);
        l3.setBackground(Color.PINK);
        b1.setBounds(480,180,100,30);
        b1.setFont(new Font("Times New Roman",Font.BOLD,17));
        t1.setBounds(170,20,220,30);
        t2.setBounds(170,60,220,30);
        t3.setBounds(170,100,220,30);
        b1.addActionListener(this);
        c.add(l);
        f.getContentPane().setBackground(Color.PINK);
        t.setEditable(false);
        f.setVisible(true);
    }

    public void actionPerformed(ActionEvent ae){
        String s=new String(ae.getActionCommand());
        if((s).equals("Update")){
            try{
                t3.setText("Row Updated");
                Class.forName("oracle.jdbc.OracleDriver");
                Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","lalitha","vasavi");
                Statement stmt=con.createStatement();
                int sid=Integer.parseInt(t1.getText());
                String severity=t2.getText();
                stmt.executeUpdate("Update severity set severity='"+severity+"'
where sid='"+sid+"'");

                ResultSet rs=stmt.executeQuery("select * from severity");
                String str=new String();
                while(rs.next())













```



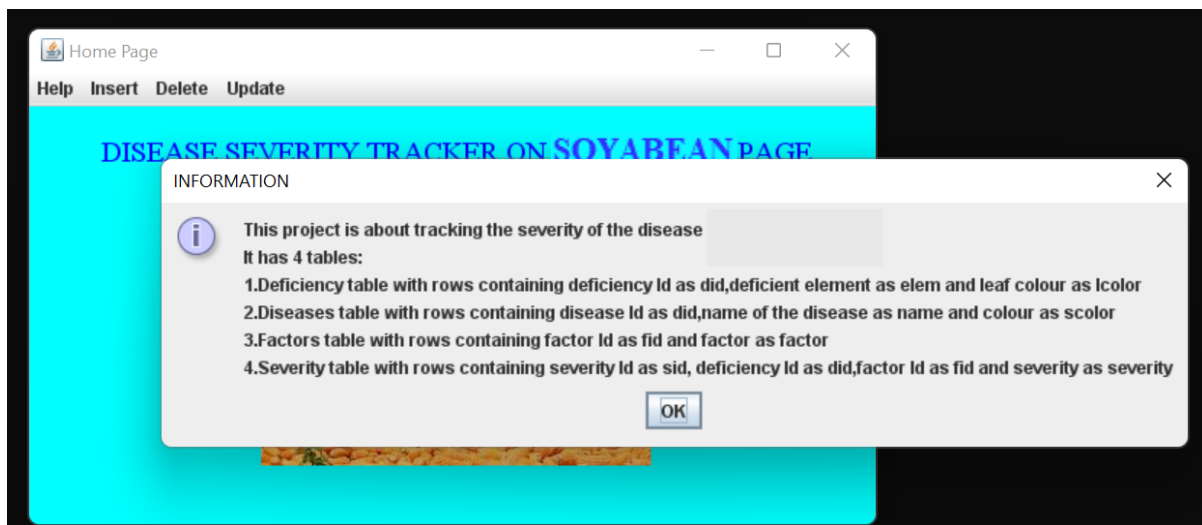
```

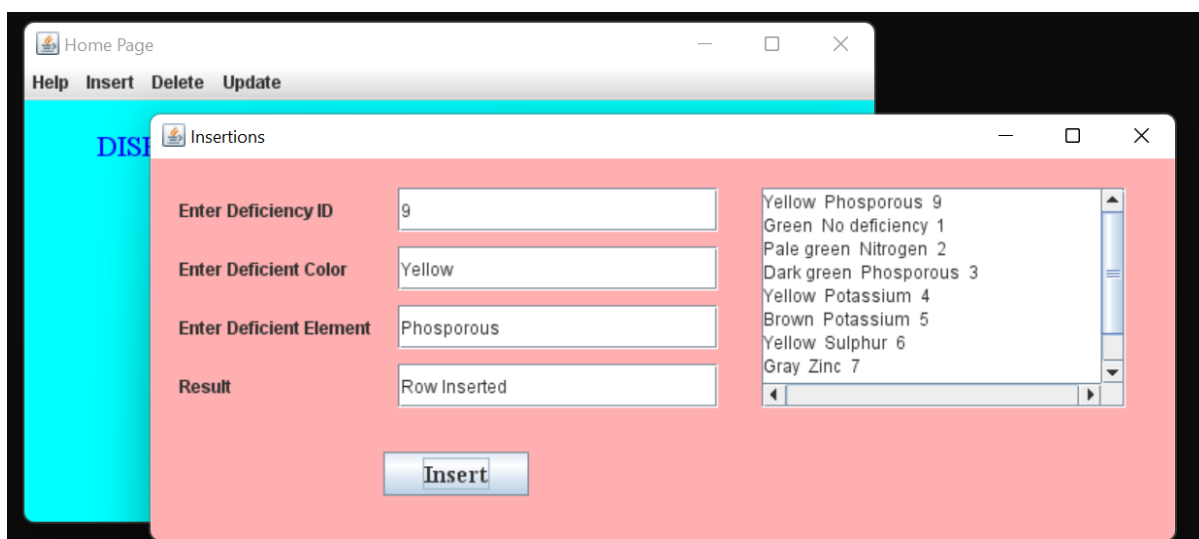
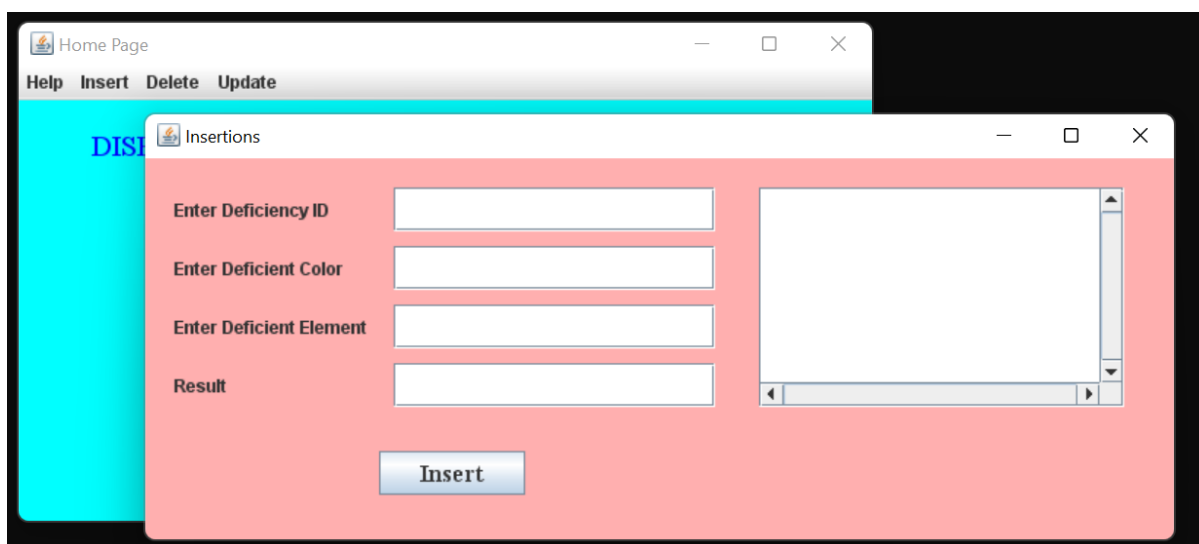
        str=str+(rs.getInt(1)+" "+rs.getInt(2)+" "+rs.getInt(3)+"
"+rs.getString(4)+"\n");
        t.setText(str);
        con.commit();
        con.close();
    }
    catch (Exception e) {
        t3.setText("Error Occured!!");
    }
}
}
public static void main(String[] args){
    new updateseverity();
}
}

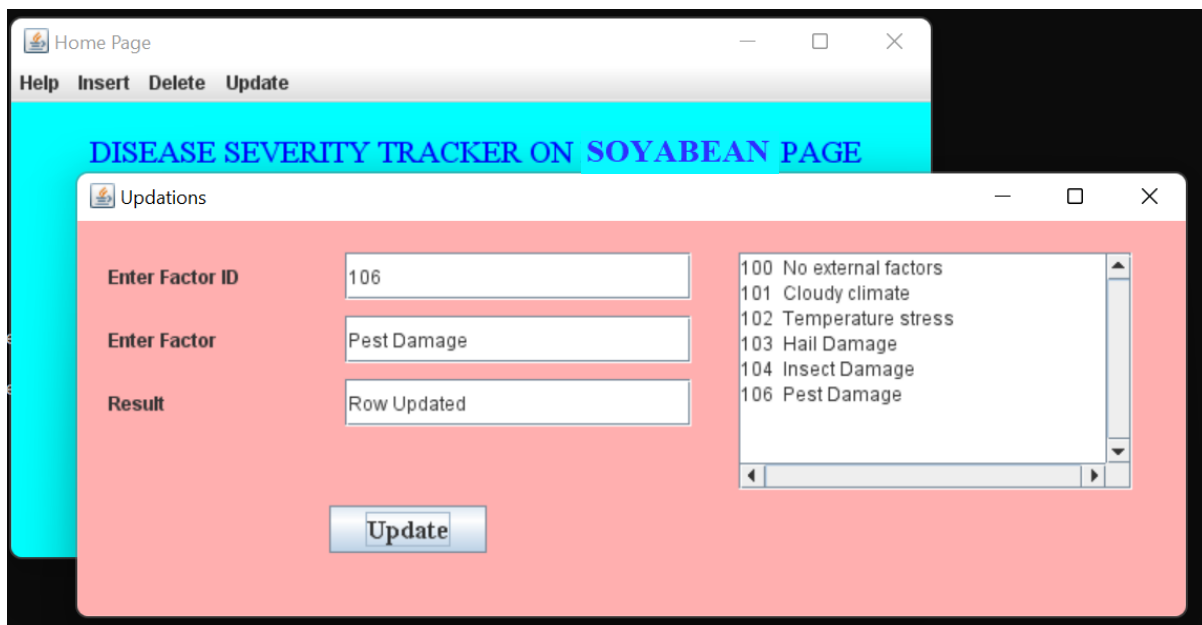
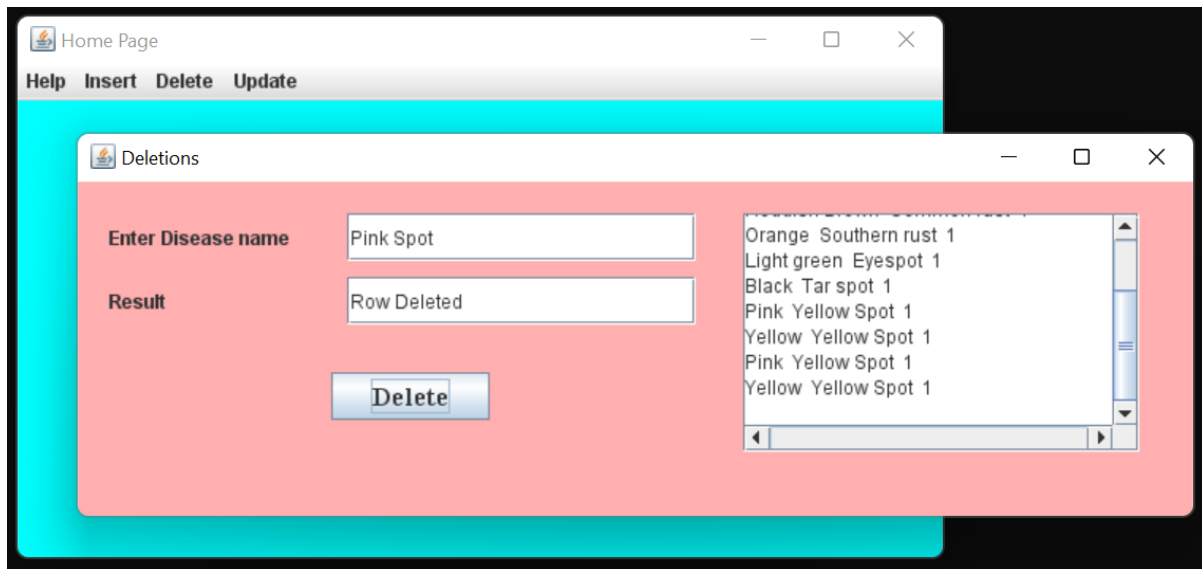
```

DBMS codes			Search DBMS codes
<input type="checkbox"/> Name	Date modified	Type	
 deletedeficiency.java	26-06-2022 21:34	JAVA File	
 deletediseases.java	26-06-2022 21:35	JAVA File	
 deletefactors.java	26-06-2022 21:35	JAVA File	
 deleteseverity.java	26-06-2022 21:35	JAVA File	
 HomePage1.java	26-06-2022 21:33	JAVA File	
 insertdeficiency.java	26-06-2022 21:34	JAVA File	
 insertdiseases.java	26-06-2022 21:34	JAVA File	
 insertfactors.java	26-06-2022 21:34	JAVA File	
 insertseverity.java	26-06-2022 21:34	JAVA File	
 updatedeficiency.java	26-06-2022 21:36	JAVA File	
 updatediseases.java	26-06-2022 21:36	JAVA File	
 updatefactors.java	26-06-2022 21:36	JAVA File	

## Testing:







**Results:** I have successfully completed my mini project “*Disease severity tracker on Soybean*”.

## DISCUSSION AND FUTURE WORK

This project is useful to check the severity of disease on crop. Future scope would be to make the UI more appealing by using graphics. One more feature would be to add login page for administrator.

## REFERENCES

<https://cals.cornell.edu/field-crops/soybeans/diseases-soybeans#:~:text=Several%20diseases%2C%20including%20Phytophthora%20root,affect%20soybeans%20in%20New%20York.>

[https://en.wikipedia.org/wiki/List\\_of\\_soybean\\_diseases](https://en.wikipedia.org/wiki/List_of_soybean_diseases)

<https://soybeanresearchinfo.com/soybean-diseases/>