

Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

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Mini Project Title: **CORONA VIRUS STATISTICS**



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Abstract

COVID-19 is the disease caused by a new coronavirus called SARS-CoV-2. WHO first learned of this new virus on 31 December 2019, following a report of a cluster of cases of 'viral pneumonia' in Wuhan, People's Republic of China. On the same topic I have decided to do my miniproject in which I have took a database from which you can get the data of india's active cases, death cases, recovered etc... you can also view it into a pie chart form, you can also retrieve the whole table from the database

Problem Statement & Features:

Develop a java Mini Project for corona virus statistics which offers the following features:

- Java database connectivity
- Retrieval from database in numerical form
- Retrieval from database of all columns in the form of piecharts

1. Java: JDK1.8



Fig. 1 Oracle Java Logo

Java is a general-purpose programming language that is class-based, object-oriented, and designed to have as few implementation dependencies as possible. Java is fast, reliable and secure. From desktop to web applications, scientific supercomputers to gaming consoles, cell phones to the Internet, Java is used in every nook and corner. Not only is Java the official programming language for Android app development (along with Kotlin), Java itself is used by Google for large parts of the Android internals.

JFreechart, JasperReport, Mail and Activations, [MySQL](#), [XAMPP](#), [Netbeans](#)

HARDWARE REQUIREMENT

- Windows 7 or higher (32bit or 64bit)
- Intel i3 processor (1.30 GHz)
- Minimum 4GB RAM
- 250GB Free Disk Space

Note: Modules to be implemented with timeline AWT date/ Mini Project session on 2 Sundays onwards (2nd session onwards). You can also include Design (phase done on paper) in the below table

Module Implementation

Sr.	Module Name	Description	Implementation Date
1	Defining the requirements	The things which I wanted to include:	1 st October 2020
		Retrieval, piecharts, survey etc...	
2	Gui design on paper	How the basic gui should look was drawn on paper	4 th October 2020
3	Gui design on netbeans	Drew the design which I wanted to implement on paper	15 th October
4	Java database connectivity	Made the database on PHPMyadmin and wrote code for its connectivity with my project	20 th October
5	Setting up jfree chart	Downloaded jfreechart	25 th October

6	Coding for piecharts	Wrote code for a chart	10 th November
7	Retrieval of complete database with jtable module	Getting y complete database as output in the form of jtable	17 th November
8	Single column retrieval from database	Getting single column as output on user entered state	22nd November
9	Inserting images as background	Giving aesthetic look by background image of people wearing mask	23 rd November

Mini Project source code

MAINGUI

```
import java.awt.Toolkit;
```

```
import java.sql.*;
```

```
import java.awt.event.*;
```

```
import java.awt.*;
```

```
public class maingui extends javax.swing.JFrame {
```

```
    Connection con;
```

```
    public maingui() {
```

```
initComponents();

//database connection

DBConnect dbc = new DBConnect();

con=dbc.Connect();

}


public void close(){

    WindowEvent WinclosingEvent = new
WindowEvent(this,WindowEvent.WINDOW_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(WinclosingEvent)
;

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

    jPanel1 = new javax.swing.JPanel();

    jLabel1 = new javax.swing.JLabel();

    jButton3 = new javax.swing.JButton();

    jButton4 = new javax.swing.JButton();

    jLabel3 = new javax.swing.JLabel();
```

```
setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

setBackground(new java.awt.Color(102, 153, 255));

getContentPane().setLayout(null);


jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());


jLabel1.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel1.setText("    IN WHICH FORM DO YOU WANT TO VIEW STATISTICS?");
jLabel1.setOpaque(true);

jPanel1.add(jLabel1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(10, 90, 530, 50));


jButton3.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton3.setText("NUMERICAL FORM");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jPanel1.add(jButton3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(320, 310, 230, 40));
```



```
jButton4.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton4.setText("PIE CHART FORM");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

jPanel1.add(jButton4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(30, 310, 230, 40));

jLabel3.setIcon(new
javax.swing.ImageIcon("C:\\Users\\HP\\Pictures\\javamiipr\\c4.jpg")); //
NOI18N

jPanel1.add(jLabel3, new org.netbeans.lib.awtextra.AbsoluteConstraints(-
20, 0, 600, 410));

getContentPane().add(jPanel1);

jPanel1.setBounds(0, 0, 580, 410);

setSize(new java.awt.Dimension(593, 451));

setLocationRelativeTo(null);

} // </editor-fold>
```

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    close();  
    numerical obj = new numerical();  
    obj.setVisible(true);  
  
    // TODO add your handling code here:  
}
```

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    close();  
    piechart obj = new piechart();  
    obj.setVisible(true);  
  
    // TODO add your handling code here:  
}
```

```
/**  
 * @param args the command line arguments  
 */  
public static void main(String args[]) {  
    /* Set the Nimbus look and feel */
```

```
//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code  
(optional) ">
```

```
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default  
look and feel.
```

```
    * For details see
```

```
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
```

```
    */
```

```
    try {
```

```
        for (javax.swing.UIManager.LookAndFeelInfo info :  
            javax.swing.UIManager.getInstalledLookAndFeels()) {
```

```
            if ("Nimbus".equals(info.getName())) {
```

```
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
```

```
                break;
```

```
            }
```

```
        }
```

```
    } catch (ClassNotFoundException ex) {
```

```
        java.util.logging.Logger.getLogger(maingui.class.getName()).log(java.util.logging  
            .Level.SEVERE, null, ex);
```

```
    } catch (InstantiationException ex) {
```

```
        java.util.logging.Logger.getLogger(maingui.class.getName()).log(java.util.logging  
            .Level.SEVERE, null, ex);
```

```
    } catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(maingui.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(maingui.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
        new maingui().setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
// Variables declaration - do not modify
```

```
private javax.swing.JButton jButton3;
```

```
private javax.swing.JButton jButton4;
```

```
private javax.swing.JLabel jLabel1;
```

```
private javax.swing.JLabel jLabel3;
```

```
private javax.swing.JPanel jPanel1;  
  
// End of variables declaration  
  
}
```

DATABASE CONNECTIVITY

```
import java.sql.*;  
  
public class DBConnect {  
  
    Connection Connect()  
    {  
        Connection con=null;  
  
        try  
        {  
  
            String URL="jdbc:mysql://localhost:3306/";  
            String DATABASE="corona_statistics";  
            String USER="root";  
            String PASSWORD="";  
  
            con = (Connection)  
DriverManager.getConnection(URL+DATABASE,USER,PASSWORD);  
  
            System.out.println("Database connection successful");  
  
        }  
    }  
}
```

```
        catch(Exception e) {System.out.println("MySQL Server is not  
RUNNING:"+e);}

    return con;

}

}
```

RETRIEVAL NUMERICAL FORM

```
import java.awt.Toolkit;

import java.awt.event.WindowEvent;

import javax.swing.*;

import java.sql.*;

import javax.swing.table.DefaultTableModel;

import java.awt.*;

/*

* 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.

*/
```

```
/**
```

```
*
```

```
* @author Drashti shah
```

```
*/
```

```
public class numerical extends javax.swing.JFrame {
```

```
    /**
```

```
    * Creates new form numerical
```

```
    */
```

```
    Connection con=null;
```

```
    PreparedStatement pst;
```

```
    JFrame f;
```

```
    JTable table;
```

```
    String columns[];
```

```
    ResultSet rs=null;
```

```
    Statement stmt=null;
```

```
    ResultSetMetaData md;
```

```
    public numerical() {
```

```
        initComponents();
```

```
    }
```

```
/**
```

```
 * This method is called from within the constructor to initialize the form.
```

```
 * WARNING: Do NOT modify this code. The content of this method is always
```

```
 * regenerated by the Form Editor.
```

```
 */
```

```
@SuppressWarnings("unchecked")
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

```
    jPanel1 = new javax.swing.JPanel();
```

```
    jLabel1 = new javax.swing.JLabel();
```

```
    jLabel2 = new javax.swing.JLabel();
```

```
    jButton1 = new javax.swing.JButton();
```

```
    jLabel3 = new javax.swing.JLabel();
```

```
    jButton2 = new javax.swing.JButton();
```

```
    jTextField1 = new javax.swing.JTextField();
```

```
    jButton3 = new javax.swing.JButton();
```

```
    jLabel4 = new javax.swing.JLabel();
```

```
setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);
```



```
jPanel1.setBorder(javax.swing.BorderFactory.createMatteBorder(0, 0, 0, 0,  
new java.awt.Color(0, 0, 0)));
```

```
jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());
```

```
jLabel1.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
```

```
jLabel1.setText("ENTER THE STATE :");
```

```
jLabel1.setOpaque(true);
```

```
jPanel1.add(jLabel1, new  
org.netbeans.lib.awtextra.AbsoluteConstraints(10, 130, 190, 30));
```

```
jLabel2.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
```

```
jLabel2.setText("VIEW COMPLETE TABLE");
```

```
jLabel2.setOpaque(true);
```

```
jPanel1.add(jLabel2, new  
org.netbeans.lib.awtextra.AbsoluteConstraints(10, 70, 230, 30));
```

```
jButton1.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
```

```
jButton1.setText("CONTINUE");
```

```
jButton1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton1ActionPerformed(evt);  
    }  
})
```

```
});
```

```
jPanel1.add(jButton1, new  
org.netbeans.lib.awtextra.AbsoluteConstraints(440, 140, 150, 30));
```

```
jLabel3.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
```

```
jLabel3.setText("GO BACK TO HOME PAGE :");
```

```
jLabel3.setOpaque(true);
```

```
jPanel1.add(jLabel3, new  
org.netbeans.lib.awtextra.AbsoluteConstraints(30, 330, 280, 40));
```

```
jButton2.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
```

```
jButton2.setText("CLICK HERE");
```

```
jButton2.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton2ActionPerformed(evt);  
    }  
});
```

```
jPanel1.add(jButton2, new  
org.netbeans.lib.awtextra.AbsoluteConstraints(430, 330, 160, 40));
```

```
jTextField1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jTextField1ActionPerformed(evt);  
    }  
});
```

```
    }

    });

    jPanel1.add(jTextField1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(240, 130, 150, 30));

    jButton3.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
    jButton3.setText("CONTINUE");
    jButton3.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton3ActionPerformed(evt);
        }
    });

    jPanel1.add(jButton3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(340, 70, 160, 30));

    jLabel4.setIcon(new
javax.swing.ImageIcon("C:\\Users\\HP\\Pictures\\javamiipr\\c4.jpg")); //
NOI18N

    jPanel1.add(jLabel4, new org.netbeans.lib.awtextra.AbsoluteConstraints(0,
0, 630, 420));

    javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());

    getContentPane().setLayout(layout);
```

```
        layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

    );

    layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

    );

    pack();

    setLocationRelativeTo(null);

} // </editor-fold>

public void close(){

    WindowEvent WinclosingEvent = new
WindowEvent(this,WindowEvent.WINDOW_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(WinclosingEvent)
;

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
try{  
String value = jTextField1.getText();  
  
    Class.forName("com.mysql.jdbc.Driver");  
String url="jdbc:mysql://127.0.0.1/corona_statistics?user=root&password=";  
con=DriverManager.getConnection(url);  
//stmt=con.createStatement();  
String qs= "select * FROM statistic WHERE state =?";  
pst = (PreparedStatement) con.prepareStatement("select * FROM statistic  
WHERE state =?");  
pst.setString(1,value);  
ResultSet rs = pst.executeQuery();  
  
DefaultTableModel model = new DefaultTableModel();  
String cols[]={"state", "TotalCases", "NewCases",  
"TotalDeaths", "NewDeaths", "TotalRceovered", "ActiveCases"};  
model.setColumnIdentifiers(cols);  
System.out.println("Model built");  
  
table = new JTable();  
//put model on the table
```

```
table.setModel(model);
```

```
table.setAutoResizeMode(JTable.AUTO_RESIZE_ALL_COLUMNS);
```

```
table.setFillsViewportHeight(true);
```

```
//Put the table in the scrollbar
```

```
JScrollPane scroll = new JScrollPane(table);
```

```
scroll.setHorizontalScrollBarPolicy(
```

```
JScrollPane.HORIZONTAL_SCROLLBAR_AS_NEEDED);
```

```
scroll.setVerticalScrollBarPolicy(
```

```
JScrollPane.VERTICAL_SCROLLBAR_AS_NEEDED);
```

```
String state = "";
```

```
String TotalCases = "";
```

```
String NewCases = "";
```

```
String TotalDeaths="";
```

```
String NewDeaths="";
```

```
String TotalRecovered = "";
String ActiveCases = "";
while(rs.next())
{

state=rs.getString("state");
TotalCases=rs.getString("TotalCases");
NewCases=rs.getString("NewCases");
TotalDeaths=rs.getString("TotalDeaths");
NewDeaths=rs.getString("NewDeaths");
TotalRecovered=rs.getString("TotalRecovered");
ActiveCases=rs.getString("ActiveCases");
model.addRow(new Object[]{state, TotalCases, NewCases,
TotalDeaths,NewDeaths,TotalRecovered,ActiveCases});
}

//Frame setup
f=new JFrame();
f.setLayout(new BorderLayout());
f.add(scroll); // add table onto scrollbar and add scrollbar to frame
f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```
f.setSize(900,700);
```

```
f.setVisible(true);
```

```
}
```

```
catch(Exception e){
```

```
System.out.println(e.getMessage());
```

```
}
```

```
}
```

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    close();
```

```
    maingui obj= new maingui();
```

```
    obj.setVisible(true);
```

```
// TODO add your handling code here:
```

```
}
```

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    display obj = new display();
```

```
    // TODO add your handling code here:
```

```
}
```



```
private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
}  
  
/**  
 * @param args the command line arguments  
 */  
public static void main(String args[]) {  
    /* Set the Nimbus look and feel */  
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code  
(optional) ">  
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default  
look and feel.  
    * For details see  
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html  
    */  
    try {  
        for (javax.swing.UIManager.LookAndFeelInfo info :  
            javax.swing.UIManager.getInstalledLookAndFeels()) {  
            if ("Nimbus".equals(info.getName())) {  
                javax.swing.UIManager.setLookAndFeel(info.getClassName());  
                break;  
            }  
        }  
    }  
}
```

```
}
```

```
} catch (ClassNotFoundException ex) {
```

```
java.util.logging.Logger.getLogger(numerical.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
} catch (InstantiationException ex) {
```

```
java.util.logging.Logger.getLogger(numerical.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
} catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(numerical.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
} catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(numerical.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
}
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
        new numerical().setVisible(true);
```

```
    }  
    });  
}
```

```
// Variables declaration - do not modify  
  
private javax.swing.JButton jButton1;  
private javax.swing.JButton jButton2;  
private javax.swing.JButton jButton3;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JPanel jPanel1;  
private javax.swing.JTextField jTextField1;  
  
// End of variables declaration  
  
}
```

#RETRIEVAL PIE CHART FORM

```
import java.awt.Toolkit;

import java.awt.event.WindowEvent;

import java.sql.*;

import java.awt.event.*;

import java.awt.*;

import org.jfree.chart.ChartFactory;

import org.jfree.chart.ChartFrame;

import org.jfree.chart.JFreeChart;
```

```
/**
 *
 * @author Drashti shah
 */
public class piechart extends javax.swing.JFrame{

    /**
     * Creates new form piechart
     */
    public piechart() {
        initComponents();
        this.setLocationRelativeTo(null);

    }

    public void close(){
        WindowEvent WinclosingEvent = new
        WindowEvent(this,WindowEvent.WINDOW_CLOSING);

        Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(WinclosingEvent)
        ;
    }
}
```

```
/**
```

```
* This method is called from within the constructor to initialize the form.
```

```
* WARNING: Do NOT modify this code. The content of this method is always
```

```
* regenerated by the Form Editor.
```

```
*/
```

```
@SuppressWarnings("unchecked")
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

```
    jPanel1 = new javax.swing.JPanel();
```

```
    jLabel2 = new javax.swing.JLabel();
```

```
    jButton1 = new javax.swing.JButton();
```

```
    jButton2 = new javax.swing.JButton();
```

```
    jButton3 = new javax.swing.JButton();
```

```
    jButton4 = new javax.swing.JButton();
```

```
    jButton5 = new javax.swing.JButton();
```

```
    jButton6 = new javax.swing.JButton();
```

```
    jButton7 = new javax.swing.JButton();
```

```
    jLabel1 = new javax.swing.JLabel();
```

```
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jLabel2.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel2.setText(" SELECT THE CATEGORY TO VIEW THE CHART :");
jLabel2.setOpaque(true);

jPanel1.add(jLabel2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(90, 20, 440, 50));
```

```
jButton1.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton1.setText("TOTAL CASES");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jPanel1.add(jButton1, new
org.netbeans.lib.awtextra.AbsoluteConstraints(83, 100, 210, 40));
```

```
jButton2.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton2.setText("NEW CASES");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jButton2ActionPerformed(evt);
    }

});

jPanel1.add(jButton2, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 100, 180, 40));


jButton3.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton3.setText("TOTAL DEATHS");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jPanel1.add(jButton3, new
org.netbeans.lib.awtextra.AbsoluteConstraints(83, 158, 210, 40));


jButton4.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton4.setText("NEW DEATHS");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
}
```



```
});

jPanel1.add(jButton4, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 160, 180, 40));

jButton5.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton5.setText("TOTAL RECOVERED");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});

jPanel1.add(jButton5, new
org.netbeans.lib.awtextra.AbsoluteConstraints(83, 216, 210, 41));

jButton6.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jButton6.setText("ACTIVE CASES");
jButton6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton6ActionPerformed(evt);
    }
});

jPanel1.add(jButton6, new
org.netbeans.lib.awtextra.AbsoluteConstraints(350, 220, 180, 41));
```

```
jButton7.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
jButton7.setText("BACK TO HOME PAGE");
jButton7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton7ActionPerformed(evt);
    }
});

jPanel1.add(jButton7, new
org.netbeans.lib.awtextra.AbsoluteConstraints(230, 340, -1, 33));

jLabel1.setIcon(new
javax.swing.ImageIcon("C:\\Users\\HP\\Pictures\\javamiipr\\c4.jpg")); //
NOI18N

jPanel1.add(jLabel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(-
10, 0, 630, 400));

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        );

        layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        );

        pack();
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

    // totalcaseschart obj = new totalcaseschart();

    try{

        totalcaseschart.main1();

    }
```

```
        catch(Exception e){

        }

        // chartFrame.setVisible(true);

        // obj.setVisible(true);
// TODO add your handling code here:

    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

        // close();

        // newcaseschart a = new newcaseschart();

        //obj.setVisible(true);
try{

        newcaseschart.main1();

        }

        catch(Exception e){

        }

    }
```

```
// TODO add your handling code here:

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

    try{

        totaldeathchart.main1();

    }

    catch(Exception e){

    }

    // TODO add your handling code here:

}

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {

    try{

        newdeathchart.main1();
```

```
}
```

```
catch(Exception e){
```

```
}
```

```
// TODO add your handling code here:
```

```
}
```

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
try{
```

```
totalrecoveredchart.main1();
```

```
}
```

```
catch(Exception e){
```

```
}
```

```
// TODO add your handling code here:
```

```
}
```

```
private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {  
    try{  
        activecaseschart.main1();  
  
    }  
    catch(Exception e){  
  
    }  
    // TODO add your handling code here:  
}  
  
private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {  
  
    maingui obj=new maingui();  
    obj.setVisible(true);  
    // TODO add your handling code here:  
}
```

```
/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code
(optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default
look and feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(piechart.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
```



```
    } catch (InstantiationException ex) {
```

```
java.util.logging.Logger.getLogger(piechart.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
```

```
    } catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(piechart.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(piechart.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
        new piechart().setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
// Variables declaration - do not modify
```

```
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private javax.swing.JButton jButton5;
private javax.swing.JButton jButton6;
private javax.swing.JButton jButton7;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JPanel jPanel1;

// End of variables declaration
}
```

#WHOLE DATABASE RETRIEVAL(JTABLE)

```
import javax.swing.*;
import java.sql.*;
import javax.swing.table.DefaultTableModel;
import java.awt.*;

public class display {

    JFrame f;

    JTable table;

    String columns[];

    Connection con=null;
```

```
ResultSet rs=null;
```

```
Statement stmt=null;
```

```
ResultSetMetaData md;
```

```
display(){
```

```
try{
```

```
Class.forName("com.mysql.jdbc.Driver");
```

```
String url="jdbc:mysql://127.0.0.1/corona_statistics?user=root&password=";
```

```
con=DriverManager.getConnection(url);
```

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

```
String qs= "SELECT
```

```
state,TotalCases,NewCases,TotalDeaths,NewDeaths,TotalRecovered,ActiveCase  
s"+
```

```
" FROM statistic";
```

```
rs = stmt.executeQuery(qs);
```

```
DefaultTableModel model = new DefaultTableModel();
```

```
String cols[]={ "state", "TotalCases", "NewCases",
```

```
"TotalDeaths", "NewDeaths", "TotalRceovered", "ActiveCases"};
```

```
model.setColumnIdentifiers(cols);
```

```
System.out.println("Model built");
```

```
table = new JTable();

//put model on the table
table.setModel(model);


table.setAutoResizeMode(JTable.AUTO_RESIZE_ALL_COLUMNS);


table.setFillsViewportHeight(true);

//Put the table in the scrollbar
JScrollPane scroll = new JScrollPane(table);


scroll.setHorizontalScrollBarPolicy(

JScrollPane.HORIZONTAL_SCROLLBAR_AS_NEEDED);


scroll.setVerticalScrollBarPolicy(

JScrollPane.VERTICAL_SCROLLBAR_AS_NEEDED);


String state = "";

String TotalCases = "";
```

```
String NewCases = "";
String TotalDeaths="";
String NewDeaths="";
String TotalRecovered = "";
String ActiveCases="";
while(rs.next())
{

state=rs.getString("state");
TotalCases=rs.getString("TotalCases");
NewCases=rs.getString("NewCases");
TotalDeaths=rs.getString("TotalDeaths");
NewDeaths=rs.getString("NewDeaths");
TotalRecovered=rs.getString("TotalRecovered");
ActiveCases=rs.getString("ActiveCases");
model.addRow(new Object[] {state, TotalCases, NewCases,
TotalDeaths,NewDeaths,TotalRecovered,ActiveCases});
}

//Frame setup
f=new JFrame();
f.setLayout(new BorderLayout());
```

```
f.add(scroll); // add table onto scrollbar and add scrollbar to frame
```

```
f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```
f.setSize(900,700);
```

```
f.setVisible(true);
```

```
}
```

```
catch(Exception e){
```

```
System.out.println(e.getMessage());
```

```
}
```

```
}
```

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

```
new display();
```

```
}
```

#CHART ACTIVE CASES

```
import java.io.*;
```

```
import java.sql.*;
```

```
import org.jfree.chart.ChartUtilities;
```

```
import org.jfree.chart.ChartFactory;
```

```
import org.jfree.chart.JFreeChart;
```

```
import org.jfree.data.general.DefaultPieDataset;
```

```
import java.awt.Toolkit;

import java.awt.event.WindowEvent;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.SQLException;


import org.jfree.chart.ChartFactory;

import org.jfree.chart.ChartFrame;


import org.jfree.data.jdbc.JDBCPieDataset;


public class totalcaseschart {

    public static void main1()throws Exception {

        //public JFreeChart demo1chart() throws Exception {

        String state[] = {

            "MAHARASHTRA",

            "ANDHRA PRADESH",

            "TAMIL NADU",

            "KARNATAKA",
```

"UTTAR PRADESH",

"DELHI",

"WEST BENGAL",

"ODISHA",

"TELENGANA",

"BIHAR",

"ASSAM",

"KERELA",

"GUJRAT",

"RAJASTHAN",

"HARYANA",

"MADHYA PRADESH",

"PUNJAB",

"CHHATISGARH",

"JHARKHAND",

"JAMMU AND KASHMIR",

"UTTRAKHAND",

"GOA",

"PUDUCHERRY",

"TRIPURA",

"HIMACHAL PRADESH",

"CHANDIGARH",


```
"MANIPUR",  
"ARUNACHAL PRADESH",  
"NAGALAND",  
"MEGHALAYA",  
" ANDAMAN AND NICOBAR",  
"LADAKH",  
"SIKKIM",  
"MIZORAM",  
"DADRA AND NAGAR HAVELI",  
"DAMAN AND DIU",  
"LAKSHADWEEP"  
  
};
```

```
/* Create MySQL Database Connection */
```

```
Class.forName( "com.mysql.jdbc.Driver" );
```

```
Connection connect = DriverManager.getConnection(
```

```
    "jdbc:mysql://localhost:3306/corona_statistics" ,
```

```
    "root",
```

```
    "");
```

```
Statement statement = connect.createStatement( );
```

```
ResultSet resultSet = statement.executeQuery("select * from statistic" );
```

```
DefaultPieDataset dataset = new DefaultPieDataset( );

while( resultSet.next( ) ) {
    dataset.setValue(
        resultSet.getString( "state" ) ,
        Double.parseDouble( resultSet.getString( "ActiveCases" ) ));
}

JFreeChart chart = ChartFactory.createPieChart(
    "Total Cases",
    dataset,
    true,
    true,
    false );

ChartFrame chartFrame = new ChartFrame("JDBC Pie Chart", chart);
chartFrame.setVisible(true);
chartFrame.setSize(560, 370);
}
```

#NEW CASES CHART

```
import java.io.*;
```

```
import java.sql.*;
```

```
import org.jfree.chart.ChartUtilities;
```

```
import org.jfree.chart.ChartFactory;
```

```
import org.jfree.chart.ChartFrame;
```

```
import org.jfree.chart.JFreeChart;
```

```
import org.jfree.data.general.DefaultPieDataset;
```

```
public class newcaseschart{
```

```
    public static void main1()throws Exception {
```

```
        String state[] = {
```

```
            "MAHARASHTRA",
```

```
            "ANDHRA PRADESH",
```

```
            "TAMIL NADU",
```

```
            "KARNATAKA",
```

```
            "UTTAR PRADESH",
```

```
            "DELHI",
```

```
            "WEST BENGAL",
```

```
            "ODISHA",
```

```
            "TELENGANA",
```

"BIHAR",

"ASSAM",

"KERELA",

"GUJRAT",

"RAJASTHAN",

"HARYANA",

"MADHYA PRADESH",

"PUNJAB",

"CHHATISGARH",

"JHARKHAND",

"JAMMU AND KASHMIR",

"UTTRAKHAND",

"GOA",

"PUDUCHERRY",

"TRIPURA",

"HIMACHAL PRADESH",

"CHANDIGARH",

"MANIPUR",

"ARUNACHAL PRADESH",

"NAGALAND",

"MEGHALAYA",

" ANDAMAN AND NICOBAR",

```
"LADAKH",  
"SIKKIM","MIZORAM",  
"DADRA AND NAGAR HAVELI",  
"DAMAN AND DIU",  
"LAKSHADWEEP"  
};
```

```
/* Create MySQL Database Connection */  
Class.forName( "com.mysql.jdbc.Driver" );  
Connection connect = DriverManager.getConnection(  
    "jdbc:mysql://localhost:3306/corona_statistics" ,  
    "root",  
    "");  
  
Statement statement = connect.createStatement( );  
ResultSet resultSet = statement.executeQuery("select * from statistic" );  
DefaultPieDataset dataset = new DefaultPieDataset( );  
  
while( resultSet.next( ) ) {  
    dataset.setValue(  
        resultSet.getString( "state" ) ,  
        Double.parseDouble( resultSet.getString( "newCases" ) ));  
}
```

```
}
```

```
JFreeChart chart = ChartFactory.createPieChart(
```

```
    "NEW CASES",
```

```
    dataset,
```

```
    true,
```

```
    true,
```

```
    false );
```

```
ChartFrame chartFrame = new ChartFrame("JDPC Pie Chart", chart);
```

```
chartFrame.setVisible(true);
```

```
chartFrame.setSize(560, 370);
```

```
}
```

```
}
```

#TOTAL DEATH CHART

```
import java.io.*;
```

```
import java.sql.*;
```

```
import org.jfree.chart.ChartUtilities;
```

```
import org.jfree.chart.ChartFactory;
```

```
import org.jfree.chart.ChartFrame;
```

```
import org.jfree.chart.JFreeChart;

import org.jfree.data.general.DefaultPieDataset;


public class totaldeathchart{


    public static void main1()throws Exception {


        String state[] = {

            "MAHARASHTRA",

            "ANDHRA PRADESH",

            "TAMIL NADU",

            "KARNATAKA",

            "UTTAR PRADESH",

            "DELHI",

            "WEST BENGAL",

            "ODISHA",

            "TELENGANA",

            "BIHAR",

            "ASSAM",

            "KERELA",

            "GUJRAT",

            "RAJASTHAN",
```

"HARYANA",
"MADHYA PRADESH",
"PUNJAB",
"CHHATISGARH",
"JHARKHAND",
"JAMMU AND KASHMIR",
"UTTRAKHAND",
"GOA",
"PUDUCHERRY",
"TRIPURA",
"HIMACHAL PRADESH",
"CHANDIGARH",
"MANIPUR",
"ARUNACHAL PRADESH",
"NAGALAND",
"MEGHALAYA",
" ANDAMAN AND NICOBAR",
"LADAKH",
"SIKKIM","MIZORAM",
"DADRA AND NAGAR HAVELI",
"DAMAN AND DIU",
"LAKSHADWEEP"


```
};
```

```
/* Create MySQL Database Connection */
```

```
Class.forName( "com.mysql.jdbc.Driver" );
```

```
Connection connect = DriverManager.getConnection(
```

```
    "jdbc:mysql://localhost:3306/corona_statistics" ,
```

```
    "root",
```

```
    "");
```

```
Statement statement = connect.createStatement( );
```

```
ResultSet resultSet = statement.executeQuery("select * from statistic" );
```

```
DefaultPieDataset dataset = new DefaultPieDataset( );
```

```
while( resultSet.next( ) ) {
```

```
    dataset.setValue(
```

```
        resultSet.getString( "state" ) ,
```

```
        Double.parseDouble( resultSet.getString( "TotalDeaths" ) ));
```

```
}
```

```
JFreeChart chart = ChartFactory.createPieChart(
```

```
    "TOTAL DEATH", // chart title
```

```
    dataset,      // data
```

```
        true,          // include legend  
        true,  
        false );
```

```
        ChartFrame chartFrame = new ChartFrame("JDPC Pie Chart", chart);  
        chartFrame.setVisible(true);  
        chartFrame.setSize(560, 370);  
    }  
}
```

#NEW DEATHS CHART

```
import java.io.*;  
import java.sql.*;  
  
import org.jfree.chart.ChartUtilities;  
import org.jfree.chart.ChartFactory;  
import org.jfree.chart.ChartFrame;  
import org.jfree.chart.JFreeChart;  
import org.jfree.data.general.DefaultPieDataset;  
  
public class newdeathchart{
```

```
public static void main1()throws Exception {
```

```
    String state[] = {
```

```
        "MAHARASHTRA",
```

```
        "ANDHRA PRADESH",
```

```
        "TAMIL NADU",
```

```
        "KARNATAKA",
```

```
        "UTTAR PRADESH",
```

```
        "DELHI",
```

```
        "WEST BENGAL",
```

```
        "ODISHA",
```

```
        "TELENGANA",
```

```
        "BIHAR",
```

```
        "ASSAM",
```

```
        "KERELA",
```

```
        "GUJRAT",
```

```
        "RAJASTHAN",
```

```
        "HARYANA",
```

```
        "MADHYA PRADESH",
```

```
        "PUNJAB",
```

```
        "CHHATISGARH",
```

```
"JHARKHAND",  
"JAMMU AND KASHMIR",  
"UTTRAKHAND",  
"GOA",  
"PUDUCHERRY",  
"TRIPURA",  
"HIMACHAL PRADESH",  
"CHANDIGARH",  
"MANIPUR",  
"ARUNACHAL PRADESH",  
"NAGALAND",  
"MEGHALAYA",  
" ANDAMAN AND NICOBAR",  
"LADAKH",  
"SIKKIM","MIZORAM",  
"DADRA AND NAGAR HAVELI",  
"DAMAN AND DIU",  
"LAKSHADWEEP"  
  
};
```

```
/* Create MySQL Database Connection */  
  
Class.forName( "com.mysql.jdbc.Driver" );
```

```
Connection connect = DriverManager.getConnection(
    "jdbc:mysql://localhost:3306/corona_statistics" ,
    "root",
    "");

Statement statement = connect.createStatement( );

ResultSet resultSet = statement.executeQuery("select * from statistic" );

DefaultPieDataset dataset = new DefaultPieDataset( );

while( resultSet.next( ) ) {
    dataset.setValue(
        resultSet.getString( "state" ) ,
        Double.parseDouble( resultSet.getString( "NewDeaths" ) ));
}

JFreeChart chart = ChartFactory.createPieChart(
    "NEW DEATH", // chart title
    dataset,     // data
    true,        // include legend
    true,
    false );
```

```
    ChartFrame chartFrame = new ChartFrame("JDPC Pie Chart", chart);  
  
    chartFrame.setVisible(true);  
  
    chartFrame.setSize(560, 370);  
  
    }  
}
```

#TOTAL RECOVERED CHART

```
import java.io.*;  
  
import java.sql.*;  
  
  
import org.jfree.chart.ChartUtilities;  
import org.jfree.chart.ChartFactory;  
import org.jfree.chart.ChartFrame;  
import org.jfree.chart.JFreeChart;  
import org.jfree.data.general.DefaultPieDataset;  
  
public class totalrecoveredchart{  
  
    public static void main1()throws Exception {
```

```
String state[] = {  
    "MAHARASHTRA",  
    "ANDHRA PRADESH",  
    "TAMIL NADU",  
    "KARNATAKA",  
    "UTTAR PRADESH",  
    "DELHI",  
    "WEST BENGAL",  
    "ODISHA",  
    "TELENGANA",  
    "BIHAR",  
    "ASSAM",  
    "KERELA",  
    "GUJRAT",  
    "RAJASTHAN",  
    "HARYANA",  
    "MADHYA PRADESH",  
    "PUNJAB",  
    "CHHATISGARH",  
    "JHARKHAND",  
    "JAMMU AND KASHMIR",  
    "UTTRAKHAND",
```

```
"GOA",  
"PUDUCHERRY",  
"TRIPURA",  
"HIMACHAL PRADESH",  
"CHANDIGARH",  
"MANIPUR",  
"ARUNACHAL PRADESH",  
"NAGALAND",  
"MEGHALAYA",  
" ANDAMAN AND NICOBAR",  
"LADAKH",  
"SIKKIM","MIZORAM",  
"DADRA AND NAGAR HAVELI",  
"DAMAN AND DIU",  
"LAKSHADWEEP"  
  
};
```

```
/* Create MySQL Database Connection */  
Class.forName( "com.mysql.jdbc.Driver" );  
Connection connect = DriverManager.getConnection(  
    "jdbc:mysql://localhost:3306/corona_statistics" ,  
    "root",
```



```
"" );
```

```
Statement statement = connect.createStatement( );
```

```
ResultSet resultSet = statement.executeQuery("select * from statistic" );
```

```
DefaultPieDataset dataset = new DefaultPieDataset( );
```

```
while( resultSet.next( ) ) {
```

```
    dataset.setValue(
```

```
        resultSet.getString( "state" ) ,
```

```
        Double.parseDouble( resultSet.getString( "TotalRecovered" ) ) );
```

```
}
```

```
JFreeChart chart = ChartFactory.createPieChart(
```

```
    "TOTOAL RECOVERED", // chart title
```

```
    dataset, // data
```

```
    true, // include legend
```

```
    true,
```

```
    false );
```

```
ChartFrame chartFrame = new ChartFrame("JDPC Pie Chart", chart);
```

```
chartFrame.setVisible(true);
```

```
chartFrame.setSize(560, 370);
```

```
}  
}
```

ACTIVE CASES CHART

```
import java.io.*;  
  
import java.sql.*;  
  
  
import org.jfree.chart.ChartUtilities;  
import org.jfree.chart.ChartFactory;  
import org.jfree.chart.ChartFrame;  
import org.jfree.chart.JFreeChart;  
import org.jfree.data.general.DefaultPieDataset;  
  
public class activecaseschart{  
  
    public static void main1()throws Exception {  
  
        String state[] = {  
            "MAHARASHTRA",  
            "ANDHRA PRADESH",  
            "TAMIL NADU",  
            "KARNATAKA",  
            "UTTAR PRADESH",
```

"DELHI",
"WEST BENGAL",
"ODISHA",
"TELENGANA",
"BIHAR",
"ASSAM",
"KERELA",
"GUJRAT",
"RAJASTHAN",
"HARYANA",
"MADHYA PRADESH",
"PUNJAB",
"CHHATISGARH",
"JHARKHAND",
"JAMMU AND KASHMIR",
"UTTRAKHAND",
"GOA",
"PUDUCHERRY",
"TRIPURA",
"HIMACHAL PRADESH",
"CHANDIGARH",
"MANIPUR",

```
"ARUNACHAL PRADESH",  
"NAGALAND",  
"MEGHALAYA",  
" ANDAMAN AND NICOBAR",  
"LADAKH",  
"SIKKIM","MIZORAM",  
"DADRA AND NAGAR HAVELI",  
"DAMAN AND DIU",  
"LAKSHADWEEP"  
  
};
```

```
/* Create MySQL Database Connection */
```

```
Class.forName( "com.mysql.jdbc.Driver" );
```

```
Connection connect = DriverManager.getConnection(
```

```
    "jdbc:mysql://localhost:3306/corona_statistics" ,
```

```
    "root",
```

```
    "");
```

```
Statement statement = connect.createStatement( );
```

```
ResultSet resultSet = statement.executeQuery("select * from statistic" );
```

```
DefaultPieDataset dataset = new DefaultPieDataset( );
```

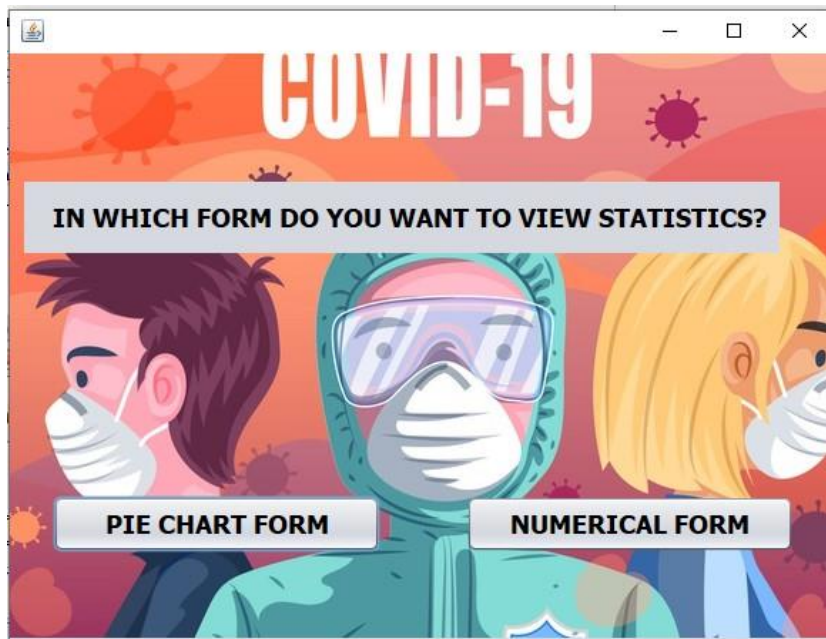
```
while( resultSet.next( ) ) {  
    dataset.setValue(  
        resultSet.getString( "state" ) ,  
        Double.parseDouble( resultSet.getString( "ActiveCases" ) ));  
}
```

```
JFreeChart chart = ChartFactory.createPieChart(  
    "ACTIVE CASES", // chart title  
    dataset,        // data  
    true,           // include legend  
    true,  
    false );
```

```
ChartFrame chartFrame = new ChartFrame("JDPC Pie Chart", chart);  
chartFrame.setVisible(true);  
chartFrame.setSize(560, 370);  
  
}  
}
```

Mini Project Result

Main gui



NUMERICAL



COMPLETE DATABASE RETRIEVAL

state	TotalCases	NewCases	TotalDeaths	NewDeaths	TotalRceovered	ActiveCases
Maharashtra	1145840	10	31351	0	812354	301752
Andhra Pradesh	601462	10	5177	0	508088	88197
Tamil Nadu	525420	10	8618	0	470192	46610
Karnataka	494356	10	7629	0	383077	103631
Uttar Pradesh	336294	10	4771	0	263288	68235
Delhi	234701	10	4877	0	198103	31721
West Bengal	215580	10	4183	0	187061	24336
Odisha	167161	10	722	0	133466	32973
Telangana	167046	2043	1016	11	135357	30673
Bihar	164224	10	855	0	149722	13646
Assam	150349	10	528	0	121610	28208
Kerala	122216	10	490	0	87341	34315
Gujarat	119088	10	3271	0	99908	15909
Rajasthan	109473	10	1293	0	90685	17495
Haryana	103773	10	1069	0	81690	21014
Madhya Pradesh	97906	10	1877	0	74398	21631
Punjab	90032	10	2646	0	65818	21568
Chhattisgarh	77775	10	628	0	41111	36036
Jharkhand	67100	10	590	0	52807	13703
Jammu and Kash...	59711	10	951	0	38521	20239
Uttarakhand	37139	10	460	0	24810	11714
Goa	26783	10	327	0	20844	5612
Puducherry	21428	10	431	0	16253	4744
Tripura	20969	273	228	6	13559	7160
Himachal Pradesh	11190	10	97	0	6919	4144
Chandigarh	9256	10	106	0	6062	3085
Manipur	8430	10	51	0	6539	1840
Arunachal Pradesh	6851	10	13	0	4967	1871
Nagaland	5306	10	10	0	4079	1193
Meghalaya	4357	10	32	0	2342	1983
Andaman and Nico...	3604	10	52	0	3378	174
Ladakh	3576	10	47	0	2558	971
Dadra and Nagar ...	2827	10	2	0	2588	210
Sikkim	2274	10	23	0	1789	462
Mizoram	1534	28	0	0	949	585
Dadra and Nagar ...	1	1	0	0	0	1
Daman and Diu	0	10	0	0	0	0
Lakshadweep	0	10	0	0	0	0

SINGLE RETRIEVAL

```
/* Create and display the window
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new main().setVisible(true);
    }
});
```

VIEW COMPLETE TABLE **CONTINUE**

ENTER THE STATE : **CONTINUE**

state	TotalCases	NewCases	TotalDeaths	NewDeaths	TotalRceovered	ActiveCases
Maharashtra	1145840	10	31351	0	812354	301752

```
statement statementer
sultSet resultSetSe
faultPieDataset

file(resultSetSe
```

GO BACK TO HOME PAGE : **CLICK HERE**

PIECHART :

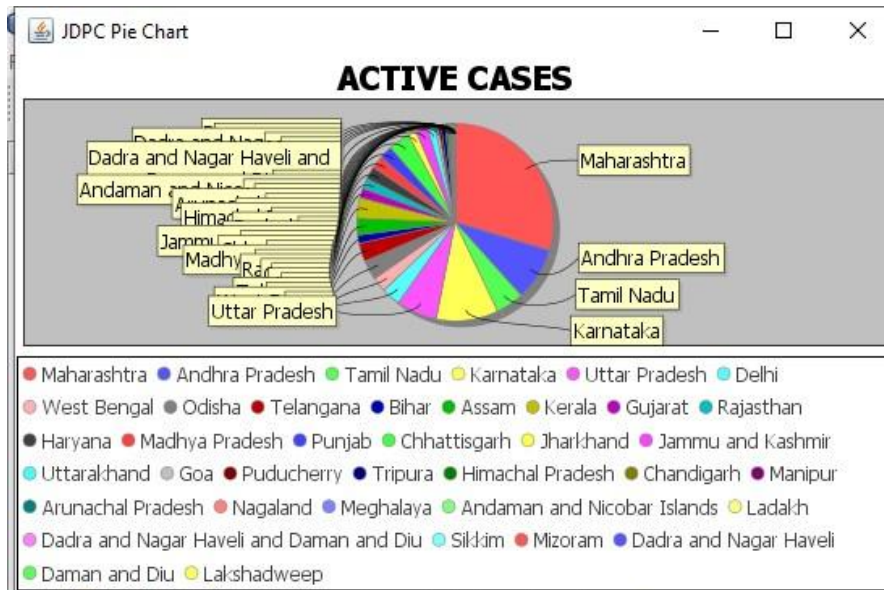
SELECT THE CATEGORY TO VIEW THE CHART :

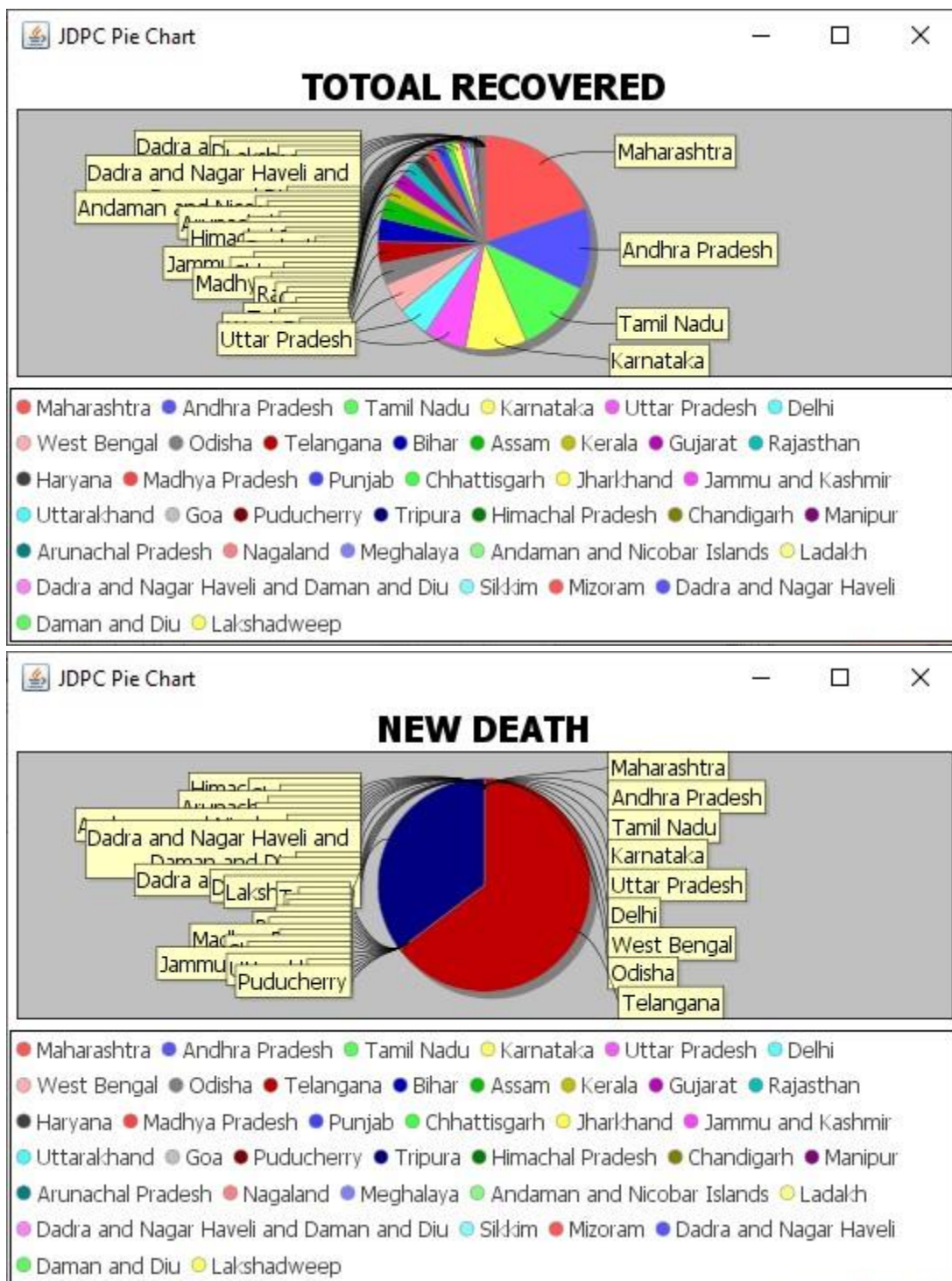
TOTAL CASES **NEW CASES**

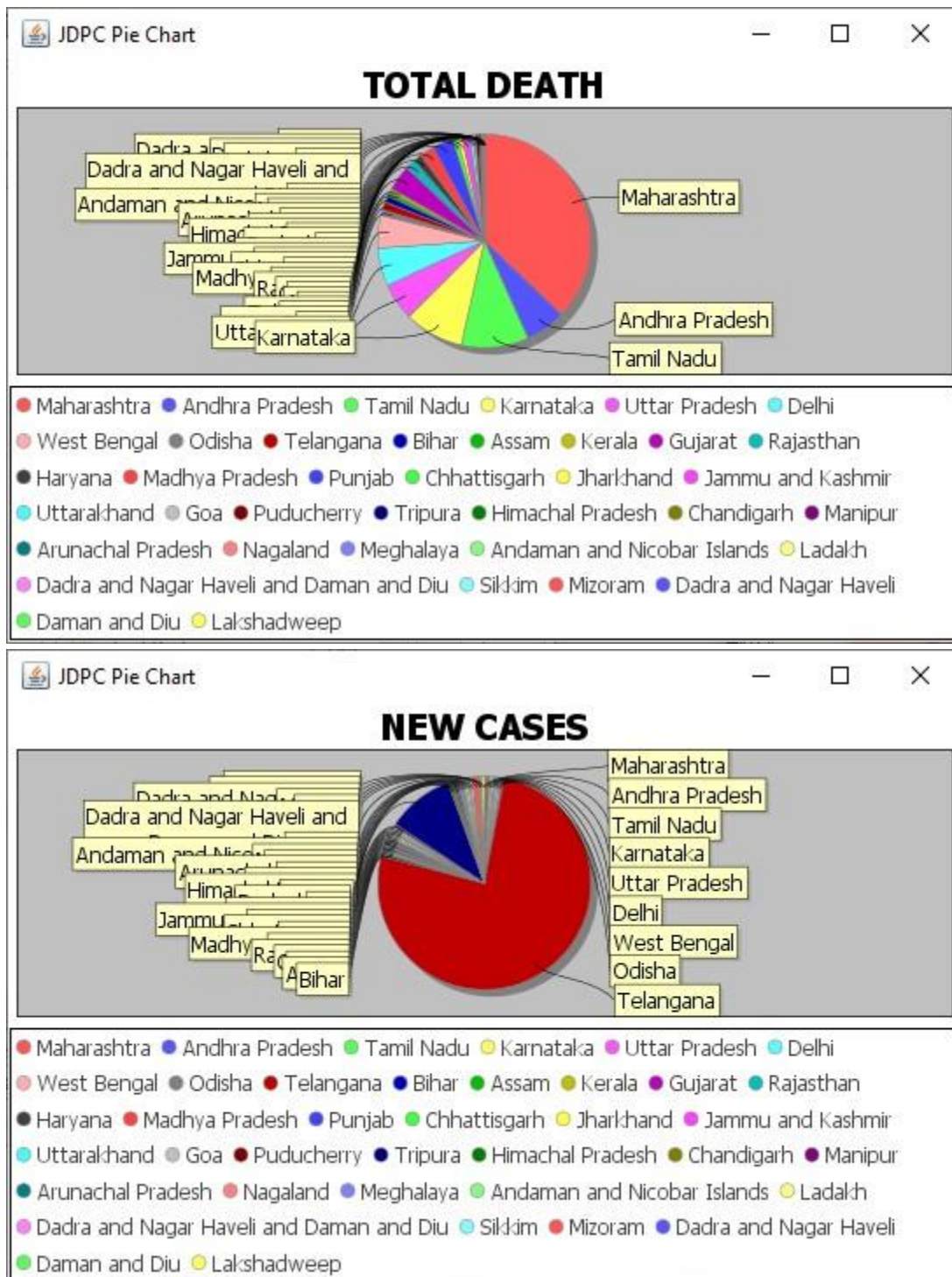
TOTAL DEATHS **NEW DEATHS**

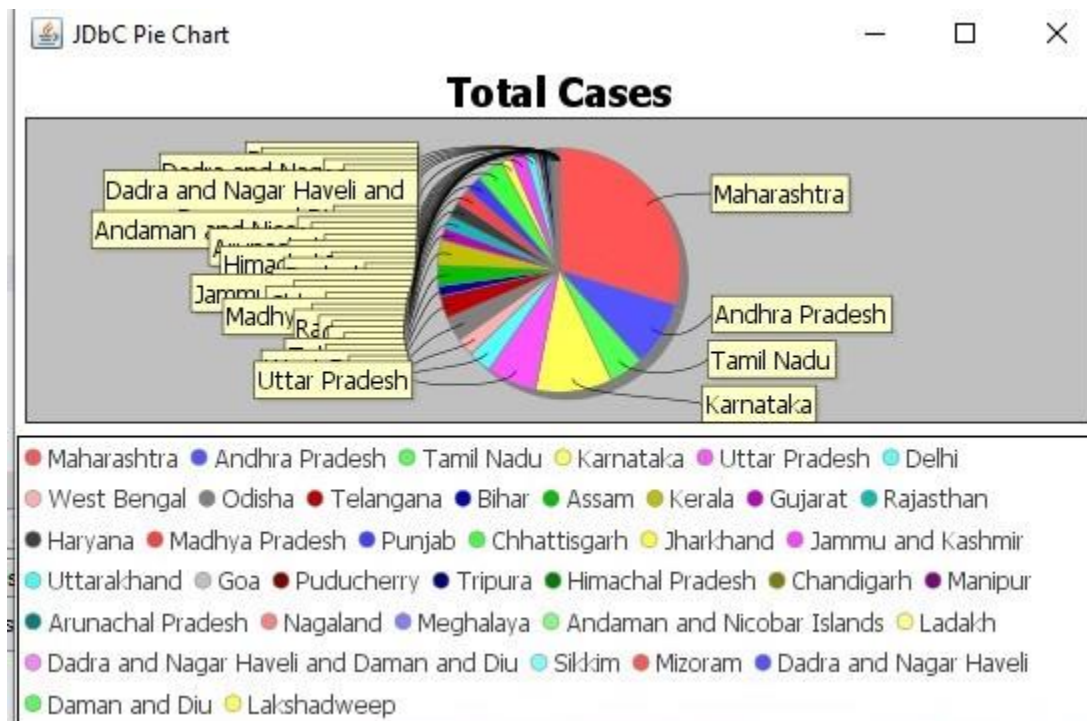
TOTAL RECOVERED **ACTIVE CASES**

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Future Scope :

This Project can be further modified and rather than static database we can connect a live database which can turn into a very useful project for users to get very important information regarding corona virus updates we can also include informative pages and spread awareness about novel corona virus or covid 19.

Conclusion

In my mini project corona virus statistics I have used several concepts of java such as Exception Handling, polymorphism and also the OOP principles such as encapsulation and abstractions, I also used java database connection with help of sql jar file and also piechart with the help of JFree Chart jar files. My mini project consist of database which is retrieved in the numerical form as well as in the form of pie chart and displayed in output.

References: Include URLs which you used for taking help

[1] <https://www.tutorialspoint.com/java/index.htm>

[2] <https://www.mygov.in/corona-data/covid19-statewise-status/>