

## DFP4033- INTEGRATIVES PROGRAMMING AND TECHNOLOGIES

### LAB EXERCISE LAYAOUT MANAGER

Using any layout manager (you can combine), develop a GUI based on the figure below. You can used your creativity to arrange the components.

#### a. GUI for Login Form



#### Coding

```
import java.awt.*;
import javax.swing.*;
import java.awt.FlowLayout;

public class Login_Form {
    JFrame f;
    Login_Form () {

        f=new JFrame("Demo application");
        JPanel p1=new JPanel ();
        JPanel p2=new JPanel ();
        JPanel p3=new JPanel ();
        JPanel p4=new JPanel ();
        JLabel lbluser=new JLabel("Enter your username");
        JLabel lblpassword=new JLabel("Enter your password");
        JButton btnlogin=new JButton("login");
```

```

        JButton btnregister=new JButton("register");
        JTextField txtuser=new JTextField(15);
        JPasswordField pf= new JPasswordField(15);

        p1.add(lbluser); p1.add(lblpassword);
        p2.add(txtuser); p2.add(pf);
        p3.add(btnlogin);
        p4.add(btnregister);

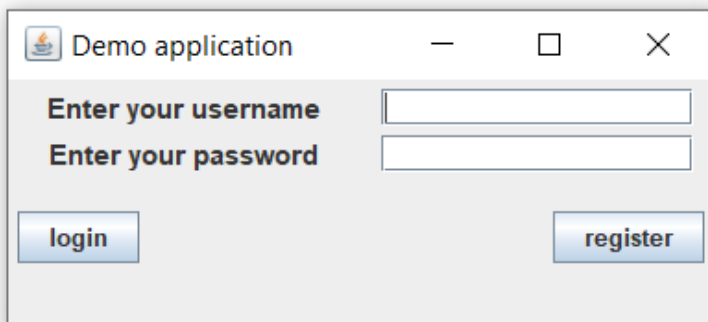
        f.add(p1);f.add(p2);f.add(p3);f.add(p4);
        f.setLayout(new GridLayout(2,2));
        p3.setLayout(new FlowLayout(FlowLayout.LEFT));
        p4.setLayout(new FlowLayout(FlowLayout.RIGHT));

        f.setSize(400,180);
        f.setVisible(true);

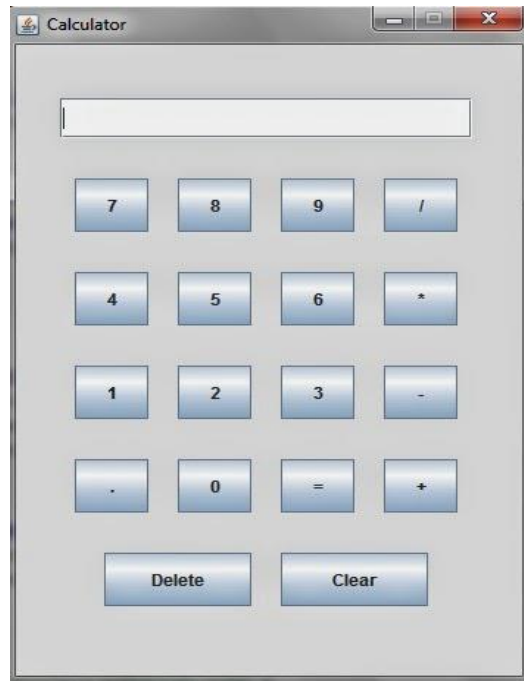
        lbluser.setFont(new Font("Roboto Condensed Light", Font.BOLD, 15));
        lblpassword.setFont(new Font("Roboto Condensed Light", Font.BOLD, 15));
        btnlogin.setFont(new Font("Roboto Condensed Light", Font.BOLD, 13));
        btnregister.setFont(new Font("Roboto Condensed Light", Font.BOLD,13));
    }
    public static void main(String[] args){
        new Login_Form();
    }
}

```

## OUTPUT



b. GUI for Calculator



## CODING

```
import java.awt.*;
import javax.swing.*;

public class Calculator {
    JFrame f;
    Calculator () {
        f=new JFrame("Calculator");
        JPanel p1=new JPanel ();
        JPanel p2=new JPanel ();
        JPanel p3=new JPanel ();
        JTextField t1=new JTextField(20);
        JButton b1=new JButton("7");
        JButton b2=new JButton("8");
        JButton b3=new JButton("9");
        JButton b4=new JButton("/");
        JButton b5=new JButton("4");
        JButton b6=new JButton("5");
        JButton b7=new JButton("6");
        JButton b8=new JButton("*");
        JButton b9=new JButton("1");
```

```

        JButton ba=new JButton("2");
        JButton bb=new JButton("3");
        JButton bc=new JButton("-");
        JButton bd=new JButton(".");
        JButton be=new JButton("0");
        JButton bf=new JButton("=");
        JButton bg=new JButton("+");
        JButton btndel=new JButton("Delete");
        btndel.setBounds(250,450,70,70);
        JButton btnclear=new JButton("Clear");
        btnclear.setBounds(350,450,70,70);

p1.add(t1);
    p2.add(b1);p2.add(b2);p2.add(b3);p2.add(b4);p2.add(b5);p2.add(b6);
    p2.add(b7);p2.add(b8);p2.add(b9);p2.add(ba);p2.add(bb);p2.add(bc);
    p2.add(bd);p2.add(be);p2.add(bf);p2.add(bg);p2.add(btndel);p2.add(btnclear);
    p3.add(btndel);p3.add(btnclear);

f.add(p1); f.add(p2); f.add(p3);

f.setLayout(new FlowLayout(FlowLayout.CENTER));
    p2.setLayout(new GridLayout(4,4,20,20));

    f.setSize(300,300);
    f.setVisible(true);
}
public static void main(String[] args) {
    new Calculator();
}
}

```

## OUTPUT

