2022

February

Software Construction and Development

Lab 03

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Section: SE - A

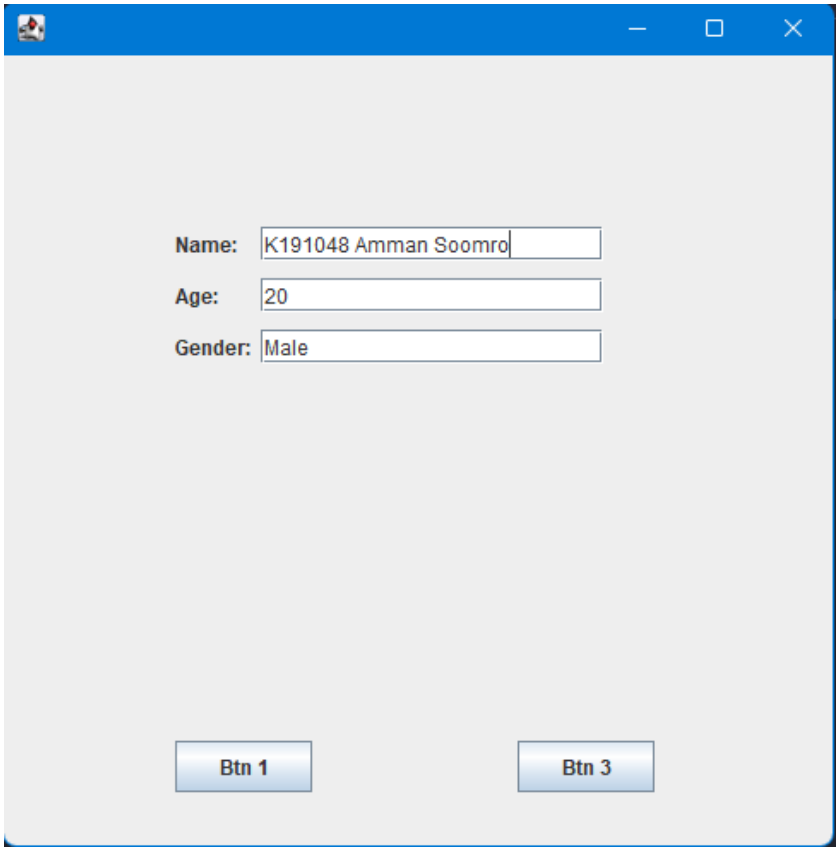
TASK 01

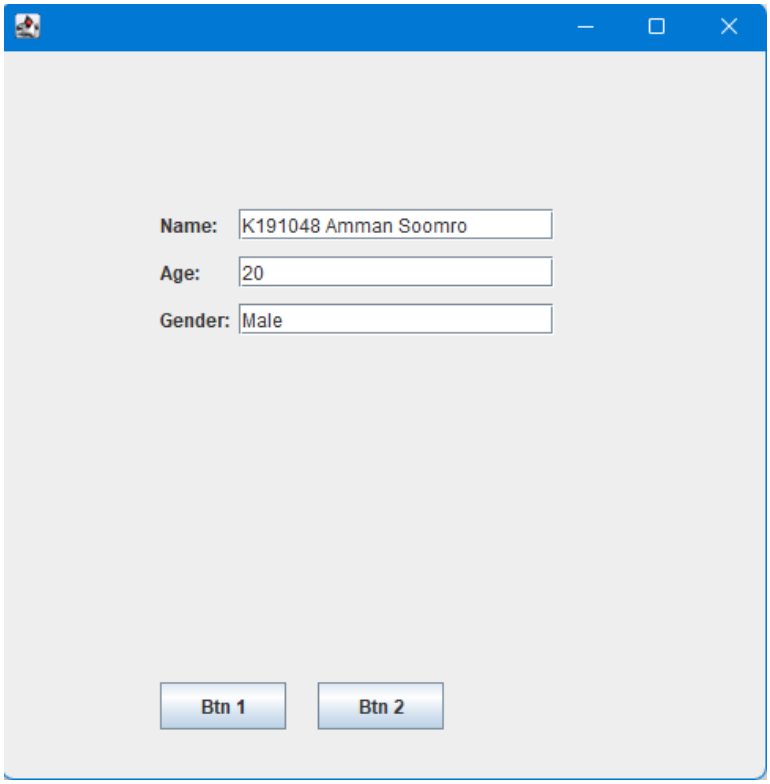
```java
package Task_01;

import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;

class FrameClass extends JFrame implements ActionListener{
    JFrame frame;
    JLabel name, age, gender;
    JTextField textfield, textfieldage, textfieldgender;
    JButton button1, button2, button3;
    public FrameClass()
    {
        frame = new JFrame();
        frame.setBounds(700, 300, 500, 500);


        name = new JLabel("Name: ");
        name.setBounds(100,90,100, 40);
        frame.add(name);

        textfield = new JTextField();
        textfield.setBounds(150,100,200,20);
        frame.add(textfield);

        age = new JLabel("Age: ");
        age.setBounds(100,120,100, 40);
        frame.add(age);

        textfieldage = new JTextField();
        textfieldage.setBounds(150,130,200,20);
        frame.add(textfieldage);

        gender = new JLabel("Gender: ");
        gender.setBounds(100,150,100, 40);
        frame.add(gender);

        textfieldgender = new JTextField();
        textfieldgender.setBounds(150,160,200,20);
        frame.add(textfieldgender);

        button1 = new JButton("Btn 1");
        button1.setBounds(100, 400, 80, 30);
```

```
        frame.add(button1);
        button1.addActionListener(this);

        button2 = new JButton("Btn 2");
        button2.setBounds(200, 400, 80, 30);
        frame.add(button2);
        button2.addActionListener(this);

        button3 = new JButton("Btn 3");
        button3.setBounds(300, 400, 80, 30);
        frame.add(button3);
        button3.addActionListener(this);

        frame.setLayout(null);
        frame.setVisible(true);
    }
    @Override
    public void actionPerformed(ActionEvent e)
    {
        if(e.getSource() == button1)
        {
            textfield.setText("K191048 Amman Soomro");
            button1.setVisible(false);
            button2.setVisible(true);
            button3.setVisible(true);
        }
        if(e.getSource() == button2)
        {
            textfieldage.setText("20");
            button1.setVisible(true);
            button2.setVisible(false);
            button3.setVisible(true);
        }
        if(e.getSource() == button3)
        {
            textfieldgender.setText("Male");
            button1.setVisible(true);
            button2.setVisible(true);
            button3.setVisible(false);
        }

    }
}
public class Task01 {
```

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



        FrameClass t = new FrameClass();
    }

}
```

OUTPUT

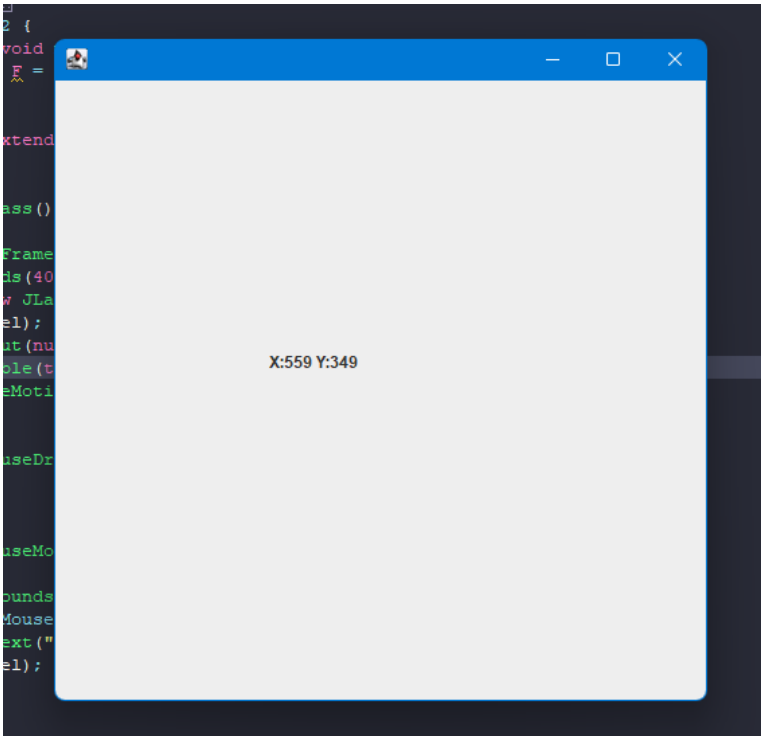

Name:
K191048 Amman Soomro
Age:
20
Gender:
Male
Btn 1
Btn 3

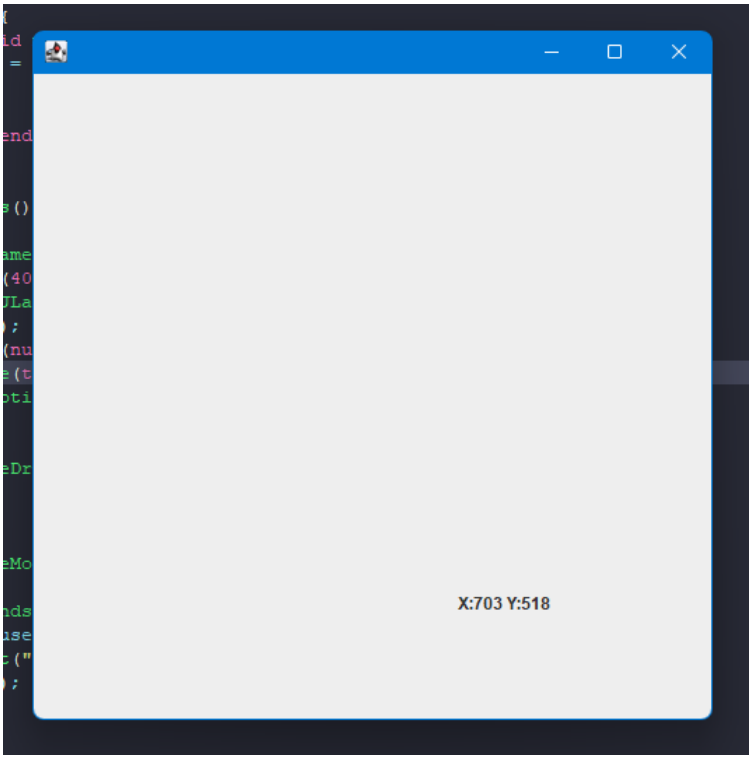

Name:
K191048 Amman Soomro
Age:
20
Gender:
Male
Btn 1
Btn 2

TASK 02

```java
package Task_02;
import java.awt.*;
import java.awt.event.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;
public class Task02 {
    public static void main(String[] args) {
        FrameClass F = new FrameClass();
    }
}
class FrameClass extends JFrame implements MouseMotionListener{
    JFrame Fr;
    JLabel label;
    public FrameClass()
    {
        Fr = new JFrame();
        Fr.setBounds(400,150,500,500);
        label = new JLabel();
        Fr.add(label);
        Fr.setLayout(null);
        Fr.setVisible(true);
        Fr.addMouseMotionListener(this);
    }
    @Override
    public void mouseDragged(MouseEvent e)
    {
    }
    @Override
    public void mouseMoved(MouseEvent e)
    {
        label.setBounds(e.getX(),e.getY(), 100, 20);
        Point p = MouseInfo.getPointerInfo().getLocation();
        label.setText("X:"+p.x + " Y:" +p.y);
        Fr.add(label);
    }
}
```

OUTPUT





TASK 03

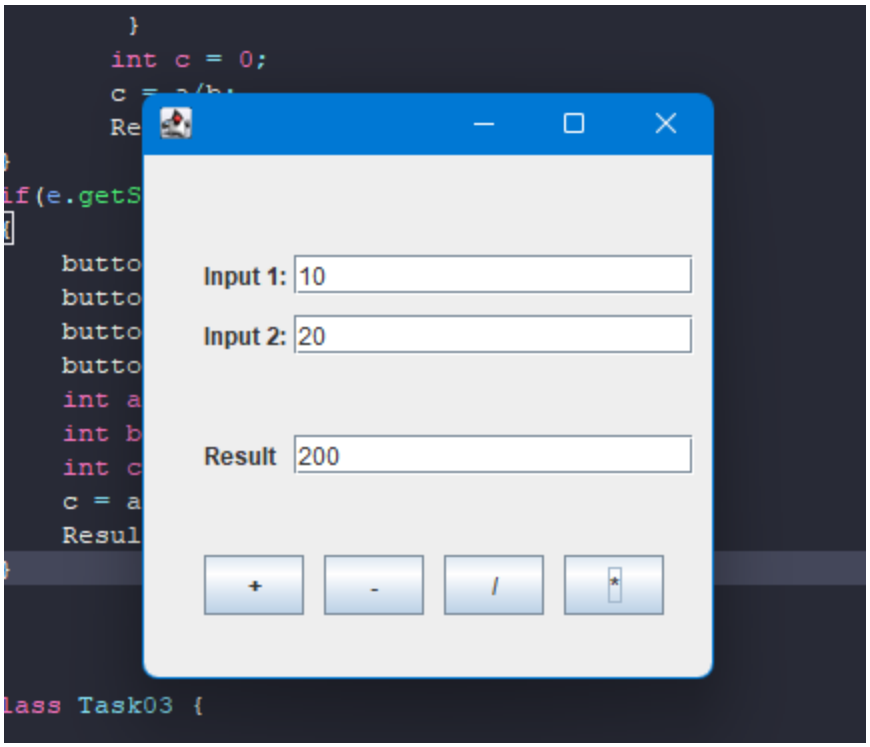
CODE

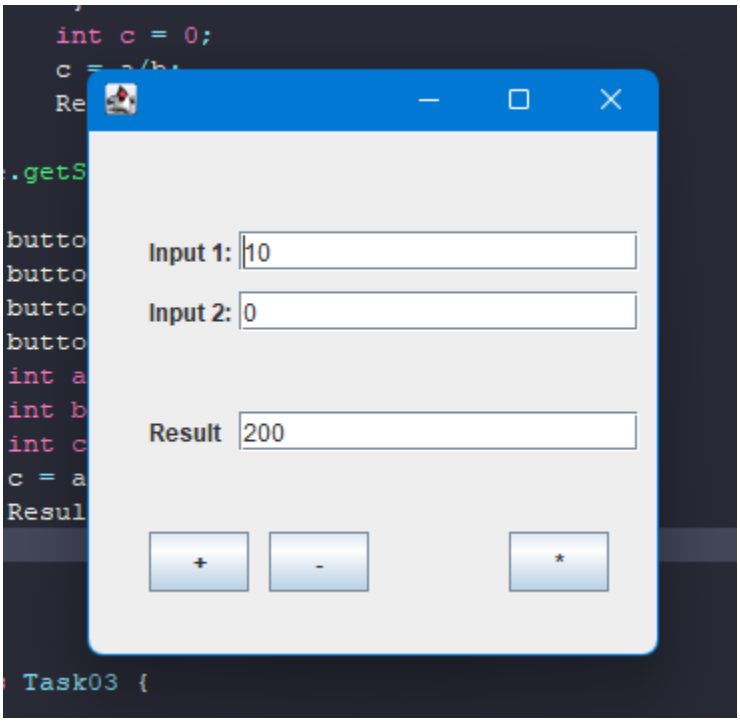
```
package Task_03;

import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;

class FrameClass extends JFrame implements ActionListener {
   JFrame frame;
   JLabel name, age, gender;
   JTextField Val1, Val2, Result;
   JButton button1, button2, button3, button4;
   public FrameClass() {
      frame = new JFrame();
      frame.setBounds(700, 300, 300, 300);

      name = new JLabel("Input 1: ");
      name.setBounds(30, 40, 100, 40);
      frame.add(name);

      Val1 = new JTextField();
      Val1.setBounds(75, 50, 200, 20);
      frame.add(Val1);

      age = new JLabel("Input 2: ");
      age.setBounds(30, 70, 100, 40);
      frame.add(age);

      Val2 = new JTextField();
      Val2.setBounds(75, 80, 200, 20);
      frame.add(Val2);

      gender = new JLabel("Result ");
      gender.setBounds(30, 130, 100, 40);
      frame.add(gender);

      Result = new JTextField();
      Result.setBounds(75, 140, 200, 20);
      frame.add(Result);

      button1 = new JButton("+");
      button1.setBounds(30, 200, 50, 30);
      frame.add(button1);
      button1.addActionListener(this);
```

```
        button2 = new JButton("-");
        button2.setBounds(90, 200, 50, 30);
        frame.add(button2);
        button2.addActionListener(this);

        button3 = new JButton("/");
        button3.setBounds(150, 200, 50, 30);
        frame.add(button3);
        button3.addActionListener(this);

        button4 = new JButton("*");
        button4.setBounds(210, 200, 50, 30);
        frame.add(button4);
        button4.addActionListener(this);

        frame.setLayout(null);
        frame.setVisible(true);
    }
    @Override
    public void actionPerformed(ActionEvent e) {
        if (e.getSource() == button1) {
            button1.setVisible(true);
            button2.setVisible(true);
            button3.setVisible(true);
            button4.setVisible(true);
            int a = Integer.parseInt(Val1.getText());
            int b = Integer.parseInt(Val2.getText());
            int c = 0;
            c = a + b;
            Result.setText(String.valueOf(c));
        }
        if (e.getSource() == button2) {
            button1.setVisible(true);
            button2.setVisible(true);
            button3.setVisible(true);
            button4.setVisible(true);
            int a = Integer.parseInt(Val1.getText());
            int b = Integer.parseInt(Val2.getText());
            int c = 0;
            c = a - b;
            Result.setText(String.valueOf(c));
        }
        if (e.getSource() == button3) {

            int a = Integer.parseInt(Val1.getText());
```

```
         int b = Integer.parseInt(Val2.getText());
         if (b == 0) {
            button3.setVisible(false);
         }
         int c = 0;
         c = a / b;
         Result.setText(String.valueOf(c));
      }
      if (e.getSource() == button4) {
         button1.setVisible(true);
         button2.setVisible(true);
         button3.setVisible(true);
         button4.setVisible(true);
         int a = Integer.parseInt(Val1.getText());
         int b = Integer.parseInt(Val2.getText());
         int c = 0;
         c = a * b;
         Result.setText(String.valueOf(c));
      }

   }
}
public class Task03 {

   public static void main(String[] args) {

      FrameClass t = new FrameClass();
   }

}
```

OUTPUT


int c = 0;
Input 1: 10
Input 2: 20
Result 200
+
-
/
*
lass Task03 {


int c = 0;
Input 1: 10
Input 2: 0
Result 200
+
-
*
Task03 {