OBJECT ORIENTED PROGRAMMING LAB

Internal II

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REG MCA – B
ROLL NO: 11

1.Using exception handling, develop a program to perform all the arithmetic operations.

Program:

```
public class Handle{
	public static void main(String[] args) {
		try{
		int firstNum = 25;
		int secondNum = 20%2;

		int div = firstNum/secondNum;
		System.out.println("Result : "+ div);
		}
		catch(ArithmeticException ae){
			System.out.println("Arithmetic
Exception occurred in code");
		}

		System.out.println("After division");

		//addition
		try{
		int firstNum = 25;
		int secondNum = 20;

		int sum = firstNum+secondNum;
		System.out.println("Result : "+ sum);
		}
```

```
        catch(ArithmeticException ae){
            System.out.println("Arithmetic
Exception occurred in code");
        }

        System.out.println("After addition");

        //Substraction
        try{
        int firstNum = 25;
        int secondNum = 20;

        int sub = firstNum-secondNum;
        System.out.println("Result : "+ sub);
        }
        catch(ArithmeticException ae){
            System.out.println("Arithmetic
Exception occurred in code");
        }

        System.out.println("After substraction");

        //multiplication
        try{
        int firstNum = 25;
        int secondNum = 20;

        int mul = firstNum*secondNum;
        System.out.println("Result : "+ mul);
```

```
            }
            catch(ArithmeticException ae){
                  System.out.println("Arithmetic
Exception occurred in code");
            }

            System.out.println("After multiplication");

            //modulo
            try{
            int firstNum = 25;
            int secondNum = 20;

            int mod = firstNum%secondNum;
            System.out.println("Result : "+ mod);
            }
            catch(ArithmeticException ae){
                  System.out.println("Arithmetic
Exception occurred in code");
            }

            System.out.println("After modulo");
      }

}
```

Output:

```
Arithmetic Exception occurred in code
After division
Result : 45
After addition
Result : 5
After substraction
Result : 500
After multiplication
Result : 5
After modulo

Process finished with exit code 0
```

2. Using an applet, draw a traffic light and change the colour using a mouse event.

Program:

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

import java.awt.event.MouseEvent;

public class trafic extends Frame
implements MouseListener {

    int cir = 0;
```

```
    public trafic() {
        addMouseListener(this);

        setSize(300, 300);
        setLayout(null);
        setVisible(true);
    }

    public void mouseClicked(MouseEvent e)
{
        Graphics g = getGraphics();

        g.setColor(Color.red);
        g.fillOval(100, 20, 50, 100);

        if (e.getClickCount() == 1) {
            g.setColor(Color.green);
            g.fillOval(100, 20, 50, 100);

        } else if (e.getClickCount() == 2) {

            g.setColor(Color.yellow);
            g.fillOval(100, 20, 50, 100);
```

```
        }

    }



    public void mouseEntered(MouseEvent
e) {

    }

    public void mouseExited(MouseEvent e) {

    }

    public void mousePressed(MouseEvent e)
{

    }

    public void mouseReleased(MouseEvent
e) {
```

```
    }

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

<html>
<head>
</head>
<body>
<div align="center">
<applet code="tdf.class" width="80
0" height="500">
</applet>
</div>
</body>
</html>
```

Output: