

# **20MCA132 OBJECT ORIENTED**

## **LAB EXAM-2**

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# SET-1

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

## **PROGRAM**

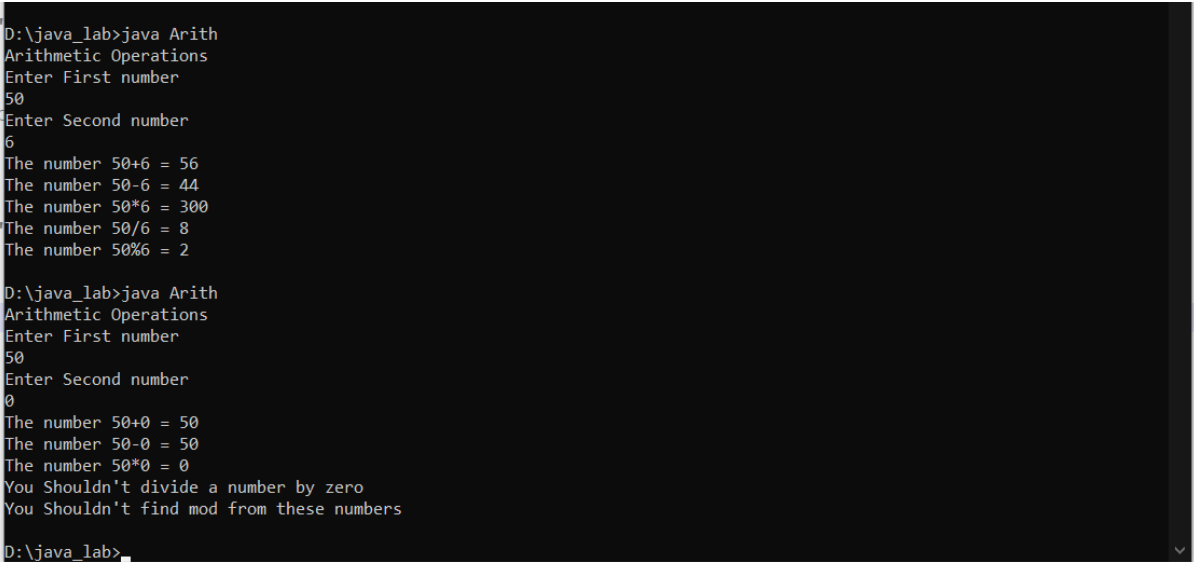
```
import java.util.*;
class Arith
{
    public static void main(String args[])
    {
        Scanner ab= new Scanner(System.in);
        System.out.println("Arithmetic Operations");
        System.out.println("Enter First number");
        int num1=ab.nextInt();
        System.out.println("Enter Second number");
        int num2=ab.nextInt();
        try{
            int sum=num1+num2;
            System.out.println ("The number "+num1+"+"+num2+" = "+sum);
        }
        catch(ArithmeticException e){
            System.out.println ("You Shouldn't add these values");
        }
        try{
            int sub=num1-num2;
            System.out.println ("The number "+num1+"-"+num2+" = "+sub);
        }
        catch(ArithmeticException e){
            System.out.println ("You Shouldn't subtract these values");
        }
        try{
            int product=num1*num2;
            System.out.println ("The number "+num1+"*"+num2+" = "+product);
        }
        catch(ArithmeticException e){
            System.out.println ("You Shouldn't multiply these numbers");
        }
        try{
            int division=num1/num2;
            System.out.println ("The number "+num1+"/"+num2+" = "+division);
        }
        catch(ArithmeticException e){
            System.out.println ("You Shouldn't divide a number by zero");
        }
    }
}
```

```

        try{
            int mod=num1%num2;
            System.out.println ("The number "+num1+"%" +num2+" = "+mod);
        }
        catch(ArithmeticException e){
            System.out.println ("You Shouldn't find mod from these numbers");
        }
    }
}

```

## **OUTPUT**



```

D:\java_lab>java Arith
Arithmetic Operations
Enter First number
50
Enter Second number
6
The number 50+6 = 56
The number 50-6 = 44
The number 50*6 = 300
The number 50/6 = 8
The number 50%6 = 2

D:\java_lab>java Arith
Arithmetic Operations
Enter First number
50
Enter Second number
0
The number 50+0 = 50
The number 50-0 = 50
The number 50*0 = 0
You Shouldn't divide a number by zero
You Shouldn't find mod from these numbers

D:\java_lab>

```

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 traffic extends Frame implements MouseListener {

    int cir = 0;

    public traffic() {
        addMouseListener(this);

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

```

```

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

    g.setColor(Color.red);
    g.fillOval(100, 50, 50, 100);
    g.setColor(Color.white);
    g.fillOval(100, 250, 50, 100);

    if (e.getClickCount() == 1) {
        g.setColor(Color.green);
        g.fillOval(100, 150, 50, 100);
        g.setColor(Color.white);
        g.fillOval(100, 50, 50, 100);
        g.setColor(Color.white);
        g.fillOval(100, 250, 50, 100);
    } else if (e.getClickCount() == 2) {

        g.setColor(Color.yellow);
        g.fillOval(100, 250, 50, 100);
        g.setColor(Color.white);
        g.fillOval(100, 150, 50, 100);
        g.setColor(Color.white);
        g.fillOval(100, 50, 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 traffic();
}
}

```

# OUTPUT

