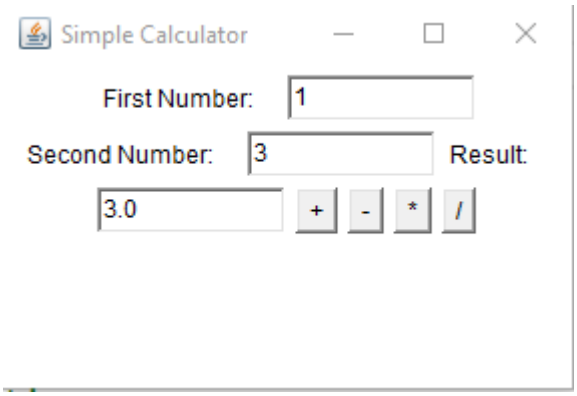
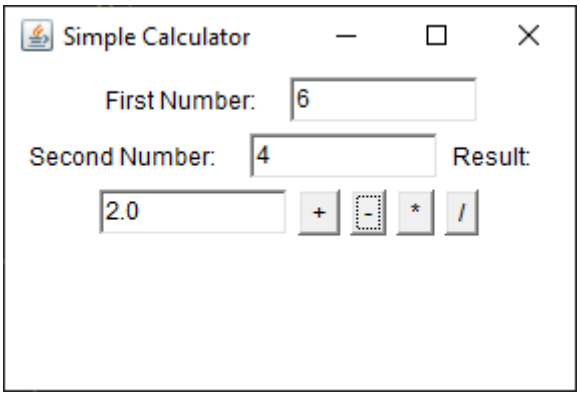
14.

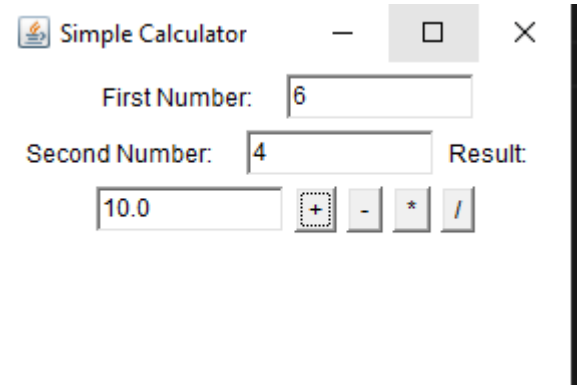
```
import java.awt.*;
import java.awt.event.*;

public class KC extends Frame implements ActionListener {
    private TextField num1Field, num2Field, resultField;
    private Button addButton, subtractButton,
multiplyButton, divideButton;

    public KC() {
        setLayout(new FlowLayout());

        // TextFields for numbers and result
        num1Field = new TextField(10);
        num2Field = new TextField(10);
        resultField = new TextField(10);
        //resultField.setEditable(false);

        // Buttons for operations
        addButton = new Button("+");
        subtractButton = new Button("-");
        multiplyButton = new Button("*");
        divideButton = new Button("/");

        // Add action listeners
        addButton.addActionListener(this);
        subtractButton.addActionListener(this);
        multiplyButton.addActionListener(this);
        divideButton.addActionListener(this);

        // Add components to the frame
        add(new Label("First Number:"));
        add(num1Field);
        add(new Label("Second Number:"));
        add(num2Field);
        add(new Label("Result:"));
        add(resultField);
        add(addButton);
```

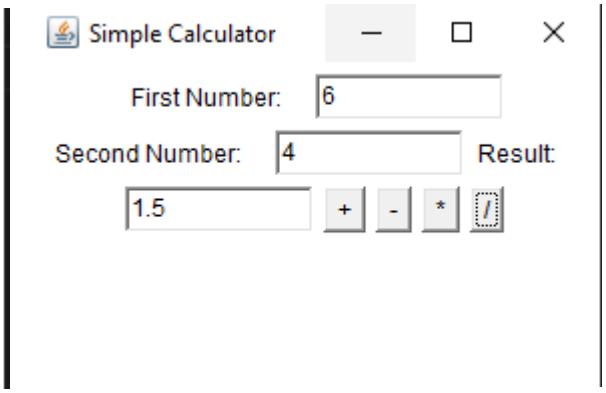
```
        add(subtractButton);
        add(multiplyButton);
        add(divideButton);

        setTitle("Simple Calculator");
        setSize(300, 200);
        setVisible(true);
    }

    public void actionPerformed(ActionEvent ae) {
        try {
            double num1 =
Double.parseDouble(num1Field.getText());
            double num2 =
Double.parseDouble(num2Field.getText());
            double result = 0;

            if (ae.getSource() == addButton)
                result = num1 + num2;
            else if (ae.getSource() == subtractButton)
                result = num1 - num2;
            else if (ae.getSource() == multiplyButton)
                result = num1 * num2;
            else if (ae.getSource() == divideButton)
                result = num1 / num2;

            resultField.setText(String.valueOf(result));
        } catch (NumberFormatException e) {
            resultField.setText("Invalid input");
        } catch (ArithmeticException e) {
            resultField.setText("Division by zero");
        }
    }

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

OUTPUT


Simple Calculator
First Number:
1
Second Number:
3
Result:
3.0
+
-
*
/


Simple Calculator
First Number:
6
Second Number:
4
Result:
2.0
+
-
*
/


Simple Calculator
First Number:
6
Second Number:
4
Result:
10.0
+
-
*
/


Simple Calculator
First Number:
6
Second Number:
4
Result:
1.5
+
-
*
/

12.

```java
//File Emp.java
package employee;

public class Emp
{
    private String name;
    private int empId;
    private String category;
    private double basicPay;
    private double hra;
    private double da;
    private double netPay;
    private double pf;
    private double grossPay;
    private double incomeTax;
    private double allowance;

    // Constructor
    public Emp(String name, int empId, String category,
double basicPay, double hra, double da) {
        this.name = name;
        this.empId = empId;
        this.category = category;
        this.basicPay = basicPay;
        this.hra = hra;
        this.da = da;
    }

    // Method to calculate allowance (12% of basic pay)
    private void calculateAllowance() {
        allowance = 0.12 * basicPay; // 12% of basic pay
    }

    // Method to calculate PF (5% of basic pay)
    private void calculatePF() {
        pf = 0.05 * basicPay; // 5% of basic pay
    }
```

```
    // Method to calculate gross pay
    private void calculateGrossPay() {
        grossPay = basicPay + hra + da + allowance;
    }

    // Method to calculate income tax (30% of gross pay)
    private void calculateIncomeTax() {
        incomeTax = 0.3 * grossPay; // 30% of gross pay
    }

    // Method to calculate net pay
    public void calculateNetPay() {
        calculateAllowance();
        calculatePF();
        calculateGrossPay();
        calculateIncomeTax();
        netPay = grossPay - pf - incomeTax;
    }

    // Method to print payslip
    public void printPaySlip() {
        System.out.println("Employee Name: " + name);
        System.out.println("Employee ID: " + empId);
        System.out.println("Category: " + category);
        System.out.println("Basic Pay: " + basicPay);
        System.out.println("HRA: " + hra);
        System.out.println("DA: " + da);
        System.out.println("Allowance: " + allowance);
        System.out.println("PF: " + pf);
        System.out.println("Gross Pay: " + grossPay);
        System.out.println("Income Tax: " + incomeTax);
        System.out.println("Net Pay: " + netPay);
    }
}
```

```java
// File: Emppay.java
import employee.Emp;

public class Emppay {
    public static void main(String[] args) {
        // Create an employee object
        Emp employee = new Emp("Arsalan Mansoorie", 2021658,
"Monthly", 80000, 20000, 10000);

        // Calculate net pay
        employee.calculateNetPay();

        // Print payslip
        employee.printPaySlip();
    }
}
```

OUTPUT

```
[Running] cd "c:\Users\geu\Desktop\atishay\" && javac Emppay.java
Employee Name: Arsalan Mansoorie
Employee ID: 2021658
Category: Monthly
Basic Pay: 80000.0
HRA: 20000.0
DA: 10000.0
Allowance: 9600.0
PF: 4000.0
Gross Pay: 119600.0
Income Tax: 35880.0
Net Pay: 79720.0

[Done] exited with code=0 in 0.627 seconds
```

1.

```
public class Command
{
    public static void main(String[] args)
    {
        if (args.length < 4)
        {
            System.out.println("ERROR OCCURED");
            return;
        }
        else
        {
            String Name,Dept,Empid,Salary;
            System.out.println("Enter the Employee Name ");
            Name=args[0];
            System.out.println("Enter the Employee
Department ");
            Dept = args[1];
            System.out.println("Enter the Employee ID ");
            Empid = args[2];
            System.out.println("Enter the Employee Salary
");
            Salary = args[3];

            System.out.println("Employee Name - "+Name);
            System.out.println("Employee Department -
"+Dept);
            System.out.println("Employee ID -
"+Integer.parseInt(Empid));
            System.out.println("Employee Salary -
"+Integer.parseInt(Salary));
        }


    }

}
```

OUTPUT

```
C:\Users\geu\Desktop\atishay>javac Command.java

C:\Users\geu\Desktop\atishay>java Command Arsalan Computer 20216 50600
Enter the Employee Name
Enter the Employee Department
Enter the Employee ID
Enter the Employee Salary
Employee Name - Arsalan
Employee Department - Computer
Employee ID - 20216
Employee Salary - 50600
```