OBJECT ORIENTED PROGRAMMING LAB

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Batch: MCA B

Date: 31/05/2022

Experiment No.: 22

Aim

Create an Arithmetic package that has classes and interfaces for the 4 basic arithmetic operations. Test the package by implementing all operations on two given numbers

Procedure

arithamatic_package.java

```
package arithmetic_package;

interface interface_graphics{
   public float add(int a, int b);
   public float divide(int a, int b);
   public float multiple(int a, int b);
   public float substract(int a, int b);
   public float remainder(int a, int b);
}

public class arithmetic_package implements interface_graphics {

    public float add(int a, int b){
        return a+b;
    }
    public float divide(int a, int b){
        return a/b;
    }
```

```
    public float multiple(int a, int b){
        return a*b;
    }
    public float substract(int a, int b){
        return a-b;
    }
    public float remainder(int a, int b){
        return a%b;
    }

}
```

main_arithmetic.java

```
import arithmetic_package.*;
import java.util.*;
class main_arithmetic {
public static void main(String []args){
arithmetic_package testObj = new arithametic_package();
int a,b;
Scanner s=new Scanner(System.in);
System.out.println("Enter the first value:");
a=s.nextInt();
System.out.println("Enteer the second value:");
b=s.nextInt();

System.out.println(testObj.add(a,b));
System.out.println(testObj.substract(a,b));
System.out.println(testObj.multiple(a,b));
```

```
System.out.println(testObj.divide(a,b));
System.out.println(testObj.remainder(a,b));
}
}
```

Output Screenshot

```
C:\Users\Student\Documents\java>javac main_arithmetic.java

C:\Users\Student\Documents\java>java  main_arithmetic
Enter the first value:
10
Enter the second value:
20
sum:30.0
difference:-10.0
product:200.0
quotient:0.0
remainder:10.0
```