

```

import java.util.Scanner;

class Complex_Op {
    float real,imag;

    Complex_Op()        //Default Constructor
    {
        real=0;
        imag=0;
    }

    Complex_Op(float r,float i) //Parameterized Constructor
    {
        real = r;
        imag = i;
    }

    public void AddNumbers(Complex_Op C1,Complex_Op C2)
    {
        float real, imag;
        real = (C1.real + C2.real);
        imag = (C1.imag + C2.imag);
        System.out.println("Addition is:(" + real + ") + (" + imag + ")i" );
    }

    public void SubNumbers(Complex_Op C1,Complex_Op C2)
    {
        float real, imag;
        real = (C1.real - C2.real);
        imag = (C1.imag - C2.imag);
        System.out.println("Subtraction is:(" + real + ") + (" + imag + ")i" );
    }

    public void MulNumbers(Complex_Op C1,Complex_Op C2)
    {
        float real, imag;

        real = (C1.real * C2.real)-(C1.imag*C2.imag);
    }
}

```

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        imag = (C1.real*C2.imag)+(C1.imag*C2.real);
        System.out.println("Multiplication is:(" + real + ") + (" + imag + ")i" );
    }

    public void DivNumbers(Complex_Op C1,Complex_Op C2)
    {
        float real, imag;

        real = ((C1.real * C2.real)+(C1.imag*C2.imag))/((C2.real *
C2.real)+(C2.imag*C2.imag));

        imag = ((C2.real*C1.imag)-(C2.imag*C1.real))/((C2.real *
C2.real)+(C2.imag*C2.imag));

        System.out.println("Division is:(" + real + ") + (" + imag + ")i" );
    }
}

class Complex {
    public static void main(String args[])
    {
        float real, imag;

        Complex_Op cal = new Complex_Op () ;
        Scanner input = new Scanner(System.in);
        System.out.println("Enter the first no.\n");
        real = input.nextInt(); //Real part
        imag = input.nextInt(); //Imaginary Part
        Complex_Op Object1 = new Complex_Op(real, imag);
        System.out.println("Enter the Second Number\n");
        real = input.nextInt(); //Real Part
        imag = input.nextInt(); //Imaginary Part
        Complex_Op Object2 = new Complex_Op(real, imag);
        cal.AddNumbers(Object1 , Object2);
        cal.SubNumbers(Object1 , Object2);
        cal.MulNumbers(Object1 , Object2);
        cal.DivNumbers(Object1 , Object2);
    }
}

```

Output

Clear

```
java -cp /tmp/q8xwDwrKrW Complex
Enter the first no.
20
12
Enter the Second Number

25
14
Addition is:(45.0) + (26.0)i
Subtraction is:(-5.0) + (-2.0)i
Multiplication is:(332.0) + (580.0)i
Division is:(0.8136419) + (0.024360536)i
```