

OBJECT ORIENTED PROGRAMMING LAB**Name: Manya Madhu****Roll No: 17****Batch: S2 RMCA B****Date: 06-04-2022****Experiment No : 3****Aim**

The program to add complex numbers.

Procedure

```
class Complex {
    double real, img;
    Complex(int r, int i) {
        real = r;
        img = i;
    }

    Complex addComp(Complex C1, Complex C2) {
        Complex sum = new Complex(0, 0);
        sum.real = C1.real + C2.real;
        sum.img = C1.img + C2.img;
        return sum;
    }
}

class ComplexMain {
    public static void main(String[] args) {

        Complex C1 = new Complex(2, 3);
        Complex C2 = new Complex(5, 6);
        Complex C3 = new Complex(0, 0);

        System.out.println("Complex number 1 : " + C1.real + " + " + C1.img + "i");
        System.out.println("Complex number 2 : " + C2.real + " + " + C2.img + "i");

        C3 = C3.addComp(C1, C2);
        System.out.println("Sum of complex numbers : " + C3.real + " + " + C3.img + "i");
    }
}
```

Output Screenshot

```
Microsoft Windows [Version 10.0.19044.1586]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Student\Desktop\java>javac ComplexMain.java

C:\Users\Student\Desktop\java>java ComplexMain
Complex number 1 : 2.0 + 3.0i
Complex number 2 : 5.0 + 6.0i
Sum of complex numbers : 7.0 + 9.0i

C:\Users\Student\Desktop\java>
```