**Name : Upas nath**

**Roll No : 47**

**Batch : B**

**Date : 06-04-22**

**OBJECT ORIENTED PROGRAMING LAB**

**Experiment No.: 3**

**Aim**

Add complex numbers.

**Source Code**

import java.util.\*;

class ComplexNumbers{

int real, imaginary;

ComplexNumbers(){ }

ComplexNumbers(int real, int imaginary){

this.real= real;

this.imaginary= imaginary;

}

void complexAdd(ComplexNumbers compNum){

int real\_sum, imaginary\_sum;

real\_sum= this.real+compNum.real;

imaginary\_sum= this.imaginary+compNum.imaginary;

System.out.println("The sum of the complex numbers is : "+real\_sum+" + "+imaginary\_sum+"i");

}

void display(){

System.out.println("The entered complex number is : "+real+" + "+imaginary+"i");

System.out.println("\n");

}

public static void main(String[] args){

int real\_num, imaginary\_num;

Scanner sc= new Scanner(System.in);

System.out.print("Enter the real value of the 1st complex number : ");

real\_num= sc.nextInt();

System.out.print("Enter the imaginary value of the 1st complex number : ");

imaginary\_num= sc.nextInt();

ComplexNumbers com1= new ComplexNumbers(real\_num, imaginary\_num);

com1.display();

System.out.print("Enter the real value of the 2nd complex number : ");

real\_num= sc.nextInt();

System.out.print("Enter the imaginary value of the 2nd complex number : ");

imaginary\_num= sc.nextInt();

ComplexNumbers com2= new ComplexNumbers(real\_num, imaginary\_num);

com2.display();

com1.complexAdd(com2);

}

}

**Output Screenshot**

