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);

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);

}

}

