

17.ComplexNo

```
import java.util.*;

class complex
{
    double x,y;
    complex()
    {
        x=0;
        y=0;
    }
    complex(double a)
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter Real part=Imganiary part of the complex no:");
        x=sc.nextInt();
        y=x;
    }
    complex(double a,double b)
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter Real part and Imganiary part of the complex no:");
        x=sc.nextInt();
        y=sc.nextInt();
    }
    void add(complex a,complex b)
    {
        x=a.x+b.x;
        y=a.y+b.y;
    }
}
```

```

void display()
{
    System.out.println(x+" "+y+"i");
}

}

class main
{
    public static void main(String args[])
    {
        complex c1=new complex(0,0);
        System.out.print("C1:");
        c1.display();
        complex c2=new complex(0);
        System.out.print("C2:");
        c2.display();
        complex c3=new complex();
        c3.add(c1,c2);
        System.out.println("C3:Addition of two complex number C1 and C2:");
        c3.display();
        c1.add(c1,c2);
        System.out.println("C1:Addition of two complex number C1 and C2:");
        c1.display();
    }
}

```

```
Command Prompt
C:\Users\jaini\Desktop\COLLEGE\SE\Java\Complex no>javac main.java
C:\Users\jaini\Desktop\COLLEGE\SE\Java\Complex no>java main
Enter Real part and Imaginary part of the complex no:
10
15
C1:10.0 + 15.0i
Enter Real part=Imaginary part of the complex no:
5
C2:5.0 + 5.0i
C3:Addition of two complex number C1 and C2:
15.0 + 20.0i
C1:Addition of two complex number C1 and C2:
15.0 + 20.0i
C:\Users\jaini\Desktop\COLLEGE\SE\Java\Complex no>
```