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Roll No: 18

Date: 6/04/22

Batch: B

OBJECT ORIENTED PROGRAMMING LAB

Experiment No.: 3

<u>Aim</u>

Add complex numbers

Procedure

```
class ComplexNumber {
```

```
int real, image;
public ComplexNumber(int r, int i)
       this.real = r;
       this.image = i;
public void showC()
       System.out.print(this.real + " +i" + this.image);
public static ComplexNumber add(ComplexNumber n1,
ComplexNumber n2)
       ComplexNumber res = new ComplexNumber(0, 0);
       res.real = n1.real + n2.real;
       res.image = n1.image + n2.image;
       return res;
}
public static void main(String arg[])
```

```
ComplexNumber c1 = new ComplexNumber(4, 5);
ComplexNumber c2 = new ComplexNumber(10, 5);

System.out.print("first Complex number: ");
c1.showC();

System.out.print("\nSecond Complex number: ");
c2.showC();

ComplexNumber res = add(c1, c2);

System.out.println("\nAddition is :");
res.showC();

}
```

Output Screenshot

```
D:\java>javac ComplexNumber.java

D:\java>javac ComplexNumber
first Complex number: 4 +i5
Second Complex number: 10 +i5
Addition is:
14 +i10
D:\java>javac ComplexNumber.java

D:\java>javac ComplexNumber
first Complex number: 5 +i8
Second Complex number: 8 +i3
Addition is:
13 +i11
D:\java>_
```