/**

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Title: Design a class Complex with data members for real and imaginary part. Provide default and Parameterized constructors. Write a program to perform arithmetic operations of two complex numbers.

CODE: **/

```
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:
first Complex number: 4+i5
Second Complex number: 10+i5
Addition is :
14+i10BUILD SUCCESSFUL (total time: 0 seconds) **/
```