جمع اعداد مختلط به زبان جاوا:

```java
public class Complex {

    int real, imaginary;

    public static void main (String[] args) {

    Complex C1 = new Complex(3, 2);

    C1.printComplexNumber();

    Complex C2 = new Complex(9, 5);

    C2.printComplexNumber();

    Complex C3 = new Complex();

    C3 = C3.addComp(C1, C2);

    System.out.print("Sum of ");

    C3.printComplexNumber();

}

    public Complex() {

    }

    public Complex (int real, int imaginary) {

        this.real = real;

        this.imaginary = imaginary;

    }

    Complex addComp (Complex C1, Complex C2) {

        Complex temp = new Complex();

        temp.real = C1.real + C2.real;

        temp.imaginary = C1.imaginary + C2.imaginary;

        // returning the sum

        return temp;

    }

    void printComplexNumber() {

        System.out.println ("Complex number: " + real + " + " + imaginary + "i");
```

```
    }
}
```

تفریق اعداد مختلط به زبان جاوا:

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```java
public class Complex {

    int real, imaginary;

    public static void main(String[] args) {

        Complex C1 = new Complex(3, 2);

        C1.printComplexNumber();

        Complex C2 = new Complex(9, 5);

        C2.printComplexNumber();

        Complex C3 = new Complex();

        C3 = C3.subtract(C1, C2);

        System.out.print("Difference of ");

        C3.printComplexNumber();

    }

    public Complex() {

    }

    public Complex(int real, int imaginary) {

        this.real = real;

        this.imaginary = imaginary;

    }

    Complex subtract(Complex C1, Complex C2) {

        Complex temp = new Complex();

        temp.real = C1.real - C2.real;

    temp.imaginary = C1.imaginary - C2.imaginary;

        return temp;

    }

    void printComplexNumber() {
```

```java
        System.out.println("Complex number: " + real + " + " + imaginary + "i");
    }
}
```

ضرب اعداد مختلط به زبان جاوا:

```java
public class Complex {
    int real, imaginary;
    public static void main(String[] args) {
        Complex C1 = new Complex(3, 2);
        C1.printComplexNumber();
        Complex C2 = new Complex(9, 5);
        C2.printComplexNumber();
        Complex C3 = new Complex();
        C3 = C3.Multiplication(C1, C2);
        System.out.print("Multiplication of ");
        C3.printComplexNumber();
    }
    public Complex() {
    }
    public Complex(int real, int imaginary) {
        this.real = real;
        this.imaginary = imaginary;
    }
    Complex Multiplication(Complex C1, Complex C2) {
        Complex temp = new Complex();
        temp.real = C1.real * C2.real - C1.imaginary * C2.imaginary;
        temp.imaginary = C1.real * C2.imaginary + C1.imaginary * C2.real;
        return temp;
    }
```

```java
    void printComplexNumber() {

        System.out.println("Complex number: " + real + " + " + imaginary + "i");

    }

}
```