Exemplul 1

```
public class Main {

    public static void main(String[] args) {
        Fraction f=new Fraction(3,2);
        ComplexFranction f1=new ComplexFranction(1,2);
        f.print();
        f1.print();
        f1.del(f);
        f1.um(f);
        f1.sl(f);
        f1.raz(f);
    }
}
class Fraction {
    private double numerator;
    private double denominator;
    Fraction(){
        numerator=1;
        denominator=2;
    }

    Fraction(double numerator, double denominator) {
        this.numerator = numerator;
        this.denominator = denominator;
    }
    public double number() {
        return numerator / denominator;
    }
    void print(){
        System.out.println(numerator+"/"+denominator);
    }

    public double getNumerator() {
        return numerator;
    }


    public double getDenominator() {
        return denominator;
    }


}
class ComplexFranction extends Fraction {
    double secondNumerator;
    double secondDenomitnator;

    ComplexFranction(double secondNumerator,double secondDenomitnator ) {
        this.secondNumerator = secondNumerator;
        this.secondDenomitnator = secondDenomitnator;
    }
```

```
    void print() {
        System.out.println(secondNumerator+"/"+secondDenomitnator);
    }

    public double number() {
        return secondNumerator / secondDenomitnator;
    }

    void del(Fraction fraction) {
        System.out.println("Impartirea:"+(number() / fraction.number()));
    }
    void um(Fraction fraction){
        System.out.println("Inmultirea:"+(number() * fraction.number()));
    }
    void sl(Fraction fraction){
        System.out.println("Adunarea:"+(number() + fraction.number()));
    }
    void raz(Fraction fraction){
        System.out.println("Diferenta:"+(number()-fraction.number()));
    }
}
```

Exemplul 2

```
public class Main {

    public static void main(String[] args) {
        Polynom f1=new ComplexPolynom(1,10,169);
        f1.print();
        f1.root();
    }
}
class Polynom{
    private int x1;
    private int x2;
    private int x3;
    Polynom(int x1, int x2, int x3){
        this.x1=x1;
        this.x2=x2;
        this.x3=x3;
    }
    Polynom(){
        x1=1;
        x2=2;
        x3=3;
    }
    void print(){
        String s=x1+"x^2";
        String s1;
        if (x2>0){
            s1=s.concat("+"+x2+"x") ;
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        }
        else{
            s1=s.concat(""+x2+"x");
        }
        if (x3>0){
            System.out.println(s1.concat("+"+x3));
        }
        else{
            System.out.println(s1.concat("-"+x3));
        }
    }
    void root(){
        double b=-x2/(2*x1);
        double a=(x2*x2)-(4*x1*x3);


        if(a<0){
            a = -a;
        }

        double sqrt = Math.sqrt(a);
        double c=sqrt/(2*x1);
        String str=b+"-"+c+"i";
    }



}
class ComplexPolynom extends Polynom{
    private int a;
    private int b;
    private int c;
    ComplexPolynom(int a, int b, int c){
        this.a=a;
        this.b=b;
        this.c=c;
    }
    void root(){
        double coef=-b/(2*a);
        double descr=(b*b)-(4*a*c);

        if(descr<0){
            descr = -descr;
        }

        double sqrt = Math.sqrt(descr);
        double sqrt1=sqrt/(2*a);
        String str=coef+"-"+sqrt1+"i";
        String str1=coef+"+"+sqrt1+"i";
        System.out.println("("+str+")"+"("+str1+")");

    }
}
```