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Quadratic - Notepad
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File Edit Format View Help
import java.util.*;
import java.lang.*;
class Quadratic{
        public static double checkD(double a, double b, double c){
                double temp = ((b*b)-(4*a*c));
                if (temp >= 0){
                        System.out.println("Given equation has real roots");
                else{
                         System.out.println("Given equation has complex roots");
                return temp;
        }
        public static void printRoots(double a, double b, double D){
                double r1, r2, temp1, d;
                if (D>=0){
                        d = Math.sqrt(D);
                        r1 = ((-b) + d/(2*a));

r2 = ((-b) - d/(2*a));
                        System.out.println();
                         System.out.println("R1 = " + r1);
                         System.out.println("R2 = " + r2);
                else{
                         d = Math.sqrt(-D);
                        temp1 = ((-b)/(2*a));
                        System.out.println();
                        System.out.println("R1 = " + temp1 + "+" + d/(2*a) + "i");
                         System.out.println("R2 = " + temp1 + "-" + d/(2*a) + "i");
        }
        public static void main(String[] args){
                Scanner s = new Scanner(System.in);
                double a, b, c, D;
                System.out.println("Enter values of a, b, c in the equation ax^2 + bx + c");
                a = s.nextDouble();
                b = s.nextDouble();
                c = s.nextDouble();
                D = checkD(a, b, c);
                printRoots(a, b, D);
        }
}
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                                                                     90%
                                                                            Windows (CRLF)
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Command Prompt

D:\Java>javac Quadratic.java

D:\Java>java Quadratic
Enter values of a, b, c in the equation ax^2 + bx + c

1
2
3
Given equation has complex roots

R1 = -1.0+1.4142135623730951i
R2 = -1.0-1.4142135623730951i

D:\Java>
```