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9 import java.util.Scanner;
10 class Quadratic
11 {
12     int a,b,c;
13     double r1,r2,d;
14     void getd()
15     {
16         Scanner s = new Scanner(System.in);
17         System.out.println("Enter the coefficients of a,b,c");
18         a = s.nextInt();
19         b = s.nextInt();
20         c = s.nextInt();
21     }
22     void compute()
23     {
24         while(a==0)
25         {
26             System.out.println("Not a quadratic equation");
27             System.out.println("Enter a non zero value for a:");
28             Scanner s = new Scanner(System.in);
29             a = s.nextInt();
30         }
31         d = b*b-4*a*c;
32         if(d==0);
33         {
34             r1 = (-b)/(2*a);
35             System.out.println("Roots are real and equal");
36             System.out.println("Root1 = Root2 = "+r1);
37         }
38         else if(d>0)
39         {
40             r1 = ((-b)+(Math.sqrt(d)))/(double)(2*a);
41             r2 = ((-b)-(Math.sqrt(d)))/(double)(2*a);
42             System.out.println("Roots are real and distinct");
43             System.out.println("Root1 = " + r1 + "Root2 = " +r2);
44         }
45         else if(d<0)

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38     else if(d>0)
39     {
40         r1 = ((-b)+(Math.sqrt(d)))/(double)(2*a);
41         r2 = ((-b)-(Math.sqrt(d)))/(double)(2*a);
42         System.out.println("Roots are real and distinct");
43         System.out.println("Root1 = " + r1 + "Root2 = " +r2);
44     }
45     else if(d<0)
46     {
47         System.out.println("Roots are imaginary");
48         r1 = (-b)/(2*a);
49         r2 = Math.sqrt(-d)/(2*a);
50         System.out.println("Root1 = " +r1+ " +i" +r2);
51         System.out.println("Root1 =" +r1+ " -i" +r2);
52     }
53 }
54 }
55
56 class QuadraticMain
57 {
58     public static void main(String args[])
59     {
60         Quadratic q = new Quadratic();
61         q.getd();
62         q.compute();
63     }
64 }
65

```