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1 //Day 8 coding Statement: Write a program to find roots of a quadratic equation
2 //Description
3 //Get the values of a, b and c (coefficients of quadratic equation) as input from the
  user and calculate the roots and print as the output.
4
5 import java.util.Scanner;
6 import java.lang.Math;
7 public class day8 {
8     public static void main(String[] args) {
9
10         Scanner sc = new Scanner(System.in);
11         System.out.print("Enter the value of a, b and c: ");
12         float a = sc.nextFloat();
13         float b = sc.nextFloat();
14         float c = sc.nextFloat();
15
16         float discriminant = (float) Math.sqrt (b*b - 4*a*c);
17         float x1,x2;
18
19         if(discriminant>=0){
20             x1 = (-b + discriminant) / 2 * a;
21             x2 = (-b - discriminant) / 2 * a;
22             if (x1!=x2){
23                 System.out.println("Roots are distinct");
24                 System.out.println("Root 1 = " + x1);
25                 System.out.println("Root 2 = " + x2);
26             }
27             else{
28                 System.out.println("Roots are equal");
29                 System.out.println("Root 1 = Root 2 = " + x1);
30             }
31         }
32         else{
33             System.out.println("Roots are not real");
34         }
35         sc.close();
36     }
37 }
38
```