

J QuadraticRoots.java 2 X

C: > Users > KALYAN > Desktop > SEM3 > java > J QuadraticRoots.java > QuadraticRoots > main(String[])

```
1 import java.util.Scanner;
2
3 public class QuadraticRoots {
4     Run| Debug
5     public static void main(String[] args) {
6         Scanner scanner = new Scanner(System.in);
7         System.out.print(s: "Enter coefficient a: ");
8         double a = scanner.nextDouble();
9         System.out.print(s: "Enter coefficient b: ");
10        double b = scanner.nextDouble();
11        System.out.print(s: "Enter coefficient c: ");
12        double c = scanner.nextDouble();
13
14        double d= b * b - 4 * a * c;
15
16        System.out.println("Discriminant = " + d);
17
18        if (d> 0) {
19            double root1 = (-b + Math.sqrt(d)) / (2 * a);
20            double root2 = (-b - Math.sqrt(d)) / (2 * a);
21            System.out.println(x: "Roots are real and distinct:");
22            System.out.println("Root 1 = " + root1);
23            System.out.println("Root 2 = " + root2);
24        }
25        else if (d== 0) {
26            double root = -b / (2 * a);
27            System.out.println(x: "Roots are real and equal:");
28            System.out.println("Root = " + root);
29        }
30        else {
31            System.out.println(x: "Roots are complex and imaginary:");
32        }
33    }
```

```
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PROBLEMS 4 DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\KALYAN> & 'C:\Program Files\Java\jdk-24\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessage'
31d9b\jdt_ws\jdt_ls-java-project\bin' 'QuadraticRoots'
Enter coefficient a: 10
Enter coefficient b: 2
Enter coefficient c: 1
Discriminant = -36.0
Roots are complex and imaginary:
PS C:\Users\KALYAN>
```