

QuadraticRoots.java 2 X

C: > Users > KALYAN > Desktop > SEM3 > java > 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     }
34 }
```

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```
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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> 
```