```java
import java.util.*;

public class Main
{


  public static void main (String[]args)
  {



    double root1, root2;

    Scanner in = new Scanner (System.in);


      System.out.println ("Enter value for a : ");

    double a = in.nextFloat ();

      System.out.println ("Enter value for b : ");

    double b = in.nextFloat ();

      System.out.println ("Enter value for c : ");

    double c = in.nextFloat ();



    double determinant = b * b - 4 * a * c;


    if (determinant > 0)
      {

    root1 = (-b + Math.sqrt (determinant)) / (2 * a);

    root2 = (-b - Math.sqrt (determinant)) / (2 * a);
```

```java
34        if (determinant > 0)
35          {
36
37      root1 = (-b + Math.sqrt (determinant)) / (2 * a);
38
39      root2 = (-b - Math.sqrt (determinant)) / (2 * a);
40
41
42      System.out.format ("root1 = %.2f and root2 = %.2f", root1, root2);
43
44        }
45
46        else if (determinant == 0)
47          {
48
49      root1 = root2 = -b / (2 * a);
50
51
52      System.out.format ("root1 = root2 = %.2f;", root1);
53
54        }
55
56        else
57          {
58
59      double realPart = -b / (2 * a);
60
61      double imaginaryPart = Math.sqrt (-determinant) / (2 * a);
62
63
64      System.out.format ("root1 = %.2f+%.2fi and root2 = %.2f-%.2fi",
65               realPart, imaginaryPart, realPart, imaginaryPart);
66
67      System.
68        out.println ("----This quadratic equation has no real roots----");
69
70        }
71    }
72 }
73
```

```
Enter value for a :
-4
Enter value for b :
3
Enter value for c :
2
root1 = -0.43 and root2 = 1.18

...Program finished with exit code 0
Press ENTER to exit console.
```

```
Enter value for a :
3
Enter value for b :
4
Enter value for c :
5
root1 = -0.67+1.11i and root2 = -0.67-1.11i----This quadratic equation has no real roots----


...Program finished with exit code 0
Press ENTER to exit console.
```