

Program to find roots of quadratic equation:

```
import java.util.Scanner;
import java.lang.Math;
class quadratic {
    public static void main(String s[])
    {
        int a, b, c;
        double root1, root2;
        Scanner nums = new Scanner(System.in);
        System.out.println("Enter the values of 'a', 'b' and 'c' for the quadratic equation: ");
        a = nums.nextInt();
        b = nums.nextInt();
        c = nums.nextInt();
        System.out.println("The quadratic equation is: " + a + "x2 + b + x + c);
        d = b*b - (4*a*c);
        if (d < 0) (d > 0)
        {
            root1 = (-b + Math.sqrt(d)) / (2*a);
            root2 = (-b - Math.sqrt(d)) / (2*a);
            System.out.println("The roots of the quadratic equation are real.");
            System.out.printf("Root 1 = %.4f", root1);
            System.out.printf("Root 2 = %.4f", root2);
        }
        else if (d == 0)
        {
System.out.println("The roots of the quadratic equation are not real");
            root1 = (-b + Math.sqrt(d)) / (2*a);
            root2 = (-b - Math.sqrt(d)) / (2*a);
            System.out.println("The roots of the quadratic equation are equal and real.");
            System.out.printf("Root 1 = %.4f \n Root 2 = %.4f", root1, root2);
        }
    }
}
```

else

{

System.out.println("The roots of the quadratic equation are
not real");

}

}

}