

ReflectionLog: QuadraticEquation

Youdis

```
1 import java.util.Scanner;
2 import java.lang.Math;
3 import java.text.DecimalFormat;
4 public class Tester
5 {
6
7     Run | Debug
8     public static void main(String args[])
9     {
10         // got decimal format and input recorder ready
11         DecimalFormat formatter = new DecimalFormat(pattern:"#.##");
12         Scanner Input = new Scanner(System.in);
```

Imported scanner math and decimalformat and created new scanner and decimal formatter.

```
//declared variables like values user will input and roots
int valA, valB, valC;
double root1, root2;
```

Declared variables for a, b,c values of quadratic equation and variables for the 2 roots of the equation.

```
//prompted user for values from a to c and recording them
System.out.print(s:"Please enter value for a: ");
valA = Input.nextInt();
System.out.print(s:"Please enter value for b: ");
valB = Input.nextInt();
System.out.print(s:"Please enter value for c: ");
valC = Input.nextInt();
```

Prompt user for the a, b, and c values of quadratic equation and record them in previously declared variables.

```
//calculated both roots from values given
root1 = (-valB + Math.sqrt(Math.pow(valB, b:2) - (4*valA*valC)))/(2*valA);
root2 = (-valB - Math.sqrt(Math.pow(valB, b:2) - (4*valA*valC)))/(2*valA);
//outputted value of roots calculated
System.out.print("The roots are " + formatter.format(root1) + " and " + formatter.format(root2));
```

Will then calculate the 2 roots of the equation and then output the roots to the user.