

Day 8 coding Statement: Write a program to find roots of a quadratic equation

Description : Get the values of a, b and c (coefficients of quadratic equation) as input from the user and calculate the roots and print as the output.

Input

Enter the value of a, b and c : 1 -6 9

Output

Roots are equal

Root 1= root 2 = 3.00

```
package com.talentbattle.codingchallenge;

import java.util.Scanner;

public class Quadratic_equation {
    public static void main(String[] args) {

        Scanner scan = new Scanner(System.in);
        System.out.println("Enter the values a,b and c ");
        double a= scan.nextDouble();
        double b= scan.nextDouble();
        double c= scan.nextDouble();

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

        roots r = new roots(a,b,c,d);

    }
}
```

```

package com.talentbattle.codingchallenge;
public class roots {

    public roots(double a, double b, double c, double d) {
        // TODO Auto-generated constructor stub

        double root1 = (-b + Math.pow(d,0.5))/(2*a);
        System.out.println(root1);

        double root2 = (-b - Math.pow(d,0.5))/(2*a);
        System.out.println(root2);

        if(root1 == root2) {
            System.out.println("Roots are equal");
            System.out.println("root1 = root2 =" + root1);
        }
        else {
            System.out.println("Roots are Unequal");
        }

    }

}

```



