Solving Quadratic equations by java

```java
package quadratic123;

import java.util.Scanner;

public class Quadratic123 {

public static void main(String[] args) {

  double r1,r2;

  Scanner sc = new Scanner(System.in);

  System.out.println("Enter the values of a,b and c ");

  double a = sc.nextDouble();

  double b = sc.nextDouble();

  double c = sc.nextDouble();

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

  if(d==0){

    System.out.println("The roots are equal");

    r1=r2= -b/2 * a;

    System.out.println("R1= " +r1 );

    System.out.println("R2= " +r2 );

  }

  if(d>0){

    System.out.println("The roots are real");

    r1 = (-b + Math.sqrt(d)) / (2 * a);

    r2 = (-b - Math.sqrt(d)) / (2 * a);

    System.out.println("R1= " +r1 );

    System.out.println("R2= " +r2 );
```

```
    }
    if(d<0){
        System.out.println("The roots are imigianry");
```

run:

1, Enter the values of a,b and c

12

8

4

The roots are imigianry

2, Enter the values of a,b and c

1

4

2

The roots are real

R1= -0.5857864376269049

R2= -3.414213562373095