```java
import java.util.Scanner;
public class program1 {
    public static void main(String[] args) {
        //Taking input
        Scanner input = new Scanner(System.in);
        System.out.println("Enter the value of: ");
        System.out.print("a : ");
        double a = input.nextDouble();
        System.out.print("b : ");
        double b = input.nextDouble();
        System.out.print("c : ");
        double c = input.nextDouble();

        //Declaring roots variables
        double r1,r2;

        //Calculating discriminant
        double discriminant = b*b - 4*a*c;

        //Checking for roots
        if(discriminant>0) {
            System.out.println("Real and Distinct roots.");
            r1 = (-b + Math.sqrt(discriminant)) / (2 * a);
            r2 = (-b - Math.sqrt(discriminant)) / (2 * a);
            System.out.println("Roots are " +r1+ " and " +r2);
        }

        else if(discriminant==0) {
            System.out.println("Real and Equal roots.");
            r1 = -b / (2.0 * a);
            r2 = r1;
            System.out.println("Roots are " +r1+ " and " +r2);
        }

        else
            System.out.println("There are no real solutions.");

    }
}
```

```
[dhruvdubey@Dhruvs-MacBook-Air JavaLab % javac program1.java
[dhruvdubey@Dhruvs-MacBook-Air JavaLab % java program1
Enter the value of:
a : 1
b : 2
c : 1
Real and Equal roots.
Roots are -1.0 and -1.0
[dhruvdubey@Dhruvs-MacBook-Air JavaLab % java program1
Enter the value of:
a : 5
b : 7
c : 9
There are no real solutions.
[dhruvdubey@Dhruvs-MacBook-Air JavaLab % java program1
Enter the value of:
a : 5
b : 7
c : 2
Real and Distinct roots.
Roots are -0.4 and -1.0
dhruvdubey@Dhruvs-MacBook-Air JavaLab % java program1
Enter the value of:
a : 1.1
b : 3.3
c : 2.4
Real and Distinct roots.
Roots are -1.2388835160664535 and -1.761116483933546
[dhruvdubey@Dhruvs-MacBook-Air JavaLab % ▮
```