```
import java.util.Scanner;

public class Quadratic
{
	public static void main(String args[])
	{
		double a,b,c,D;
		double r1,r2;

		Scanner in = new Scanner(System.in);

		System.out.println("Enter  a,b and c of the quadratic equation a(x)^2+b(x)
+c=0 : ");
		a = in.nextDouble();
		b = in.nextDouble();
		c = in.nextDouble();
		System.out.println();
		System.out.println("Input Equation : "+a+"(x)^2 + "+b+"(x) + "+c+" = 0");
		System.out.println();

		D = (b*b)-(4*a*c);

		if(D>0)
		{
			System.out.println("Roots are real and unequal since Discriminant =
"+D);
			r1 = (-b + Math.sqrt(D))/(2*a);
			r2 = (-b - Math.sqrt(D))/(2*a);
			System.out.println();
			System.out.println("Roots of the quadratic equation are "+r1+" and
"+r2);
		}
		else if(D==0)
		{
			System.out.println("Roots are real and equal since Discriminant =
"+D);
			r1 = r2 = (-b)/(2*a);
			System.out.println();
			System.out.println("Roots of the quadratic equation are "+r1+" and
"+r2);
		}
		else
		{
			System.out.println();
			System.out.println("Roots are unreal since Discriminant = "+D);
		}
```

```
        }
}
```

```
Enter the constants a,b and c of the quadratic equation a(x)^2+b(x)+c=0 :
1
-2
1

Input Quadration Equation : 1.0(x)^2 + -2.0(x) + 1.0 = 0

Roots are real and equal since Discriminant = 0.0

Roots of the quadratic equation are 1.0 and 1.0


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(program exited with code: 0)

Press any key to continue . . .
```