Date No.

```
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 & c of
        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)
```

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```
{
System.out.println(" Roots are real & 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 quadratic equation
    are " +r1+" and " + r2);
 }
 else
 {
 System.out.println();
 System.out.println(" Roots are unreal
 since Discriminant = "+D);
 }
}
```