LAB-3 (OOJ)

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```
import java.util.*;
import java.lang.*;
class roots
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        int a, b, c, f = 0;
        double r1, r2, D;
        System.out.println("Enter the values of a, b, c
                            for a quadratic eqn");
        a = sc.nextInt();
        b = sc.nextInt();
        c = sc.nextInt();
        D = (b*b) - (4*a*c);
        if (D == 0)
        {
            System.out.println("Roots are real and equal");
            f = 1;
        }
        else if (D > 0)
        {
            System.out.println("Roots are real and
                                unequal");
            f = 1;
        }
        else if (D < 0)
        {
            System.out.println("Roots are imaginary");
        }
        if (f == 1)
        {
            r1 = ((-b + Math.sqrt(D)) / (2*a));
            r2 = ((-b - Math.sqrt(D)) / (2*a));
        }
        System.out.println("Roots are : " + r1 + ", " + r2);
    }
}
```