

## Lab Program 1:

```
#import java.util.*;
class lab1
{
    public static void main(String args[])
    {
        int a, b, c, count = 0;
        double D, x1, x2;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the values of a, b and c");
        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");
            count = 1;
        }
        else if (D > 0)
        {
            System.out.println("Roots are real and unequal");
            count = 1;
        }
        else
            System.out.println("The roots are imaginary");
        if (count == 1)
        {
            x1 = ((-b + Math.sqrt(D)) / (2*a));
            x2 = ((-b - Math.sqrt(D)) / (2*a));
            System.out.println("The roots are: " + x1 + ", " + x2);
        }
    }
}
```