LAB PROGRAM

```java
import java.util.*;
import java.lang.*;

public class Main
{
    public static void main (String args[])
    {
        System.out.println ("Enter a, b, c of the
                            quadratic equation:");
        Scanner scan= new Scanner (System.in);
        double  a = scan.nextDouble ();
        double  b = scan.nextDouble ();
        double  c = scan.nextDouble ();
        double D = (b*b)-(4*a*c);
        System.out.println ("D = "+d);
        if (d==0)
        {
            double r1 = -b/(2*a);
            System.out.println ("The roots are real and
                                equal.");
            System.out.println (r1);
        }
        else if (d>0)
        {
            double r1 = (-b+Math.sqrt (d))/(2*a);
            double r2 = (-b-Math.sqrt (d))/(2*a);
```

```java
System.out.println ("The roots are real and
                            distinct.");
System.out.println (r1 + " and "+r2);
        }
    else
        {
            System.out.println ("There are no real
                            roots.");
        }
    }
}
```