

LAB-1

```
import java.util.Scanner;
import java.lang.*;
class Quadratic {
    public static void main (String[] args)
    { double a, b, c, r1, r2, d;
        Scanner scan = new Scanner (System.in);
        System.out.println("enter the co-efficients of
            the quadratic equation a, b and c\n");
        a = scan.nextDouble();
        b = scan.nextDouble();
        c = scan.nextDouble();

        d = b*b - (4*a*c);
        if (d < 0)
        { system.out.println("There are no real solutions
            for this quadratic equation\n");
            System.exit(0); }
        r1 = (-b + Math.sqrt(d)) / (2*a);
        r2 = (-b - Math.sqrt(d)) / (2*a);
        if (d == 0)
        { system.out.println("The solutions are real
            and equal to " + r1);
        }
    }
}
```

else

```
{ system.out.println("The real solutions are  
/ n" + r1 + " and " + r2); }
```

```
}
```

```
}
```