

## Java1(Quadratic Equation):

```
import java.util.Scanner;

import java.lang.Math;

public class Quad{

    public static void main(String args[])

    {

        System.out.println("Enter values of a,b and c of a quadratic equation:");

        Scanner sc=new Scanner(System.in);

        int a,b,c;

        a=sc.nextInt();

        b=sc.nextInt();

        c=sc.nextInt();

        double d,x1,x2;

        d=b*b-4*a*c;

        if(d<0)

        {

            System.out.println("Equation does not have any real roots!");

        }

        else

        {

            x1=(-b+Math.sqrt(d))/(2*a);

            x2=(-b-Math.sqrt(d))/(2*a);

            System.out.println("Roots are:\nx1="+x1+"\nx2="+x2);

        }

    }

}
```

## OUTPUT:

```
C:\Users\misaf\Desktop\OOJ-LAB>javac Quad.java

C:\Users\misaf\Desktop\OOJ-LAB>java Quad
Enter values of a,b and c of a quadratic equation:
1
10
4
Roots are:
x1=-0.41742430504416017
x2=-9.582575694955839
```

```
C:\Users\misaf\Desktop\OOJ-LAB>java Quad
Enter values of a,b and c of a quadratic equation:
10
3
9
Equation does not have any real roots!
```