

WEEK-3

Develop a Java Program that prints all the real solutions to the quadratic equation $ax^2 + bx + c = 0$. Read in a, b, c and use the quadratic formula. If the discriminate $b^2 - 4ac$ is -ve, display a message stating that there are no real solutions.

```

import java.util.Scanner;
class Quadratic Equation main
{
    public static void main (String[] args)
    {
int a, b, c;
        Scanner m = new Scanner (System.in);
        System.out.print("Enter a, b, c of the eqn:");
        double a = m.nextDouble();
        double b = m.nextDouble();
        double c = m.nextDouble();
        double d = b*b - 4*a*c;
        double root1, root2;
        if (d >= 0)
        {
            root1 = (-b + sqrt(d)) / (2*a);
            root2 = (-b - sqrt(d)) / (2*a);
            System.out.println("The real roots are: " + root1 + " " + root2);
        }
        else
        {
            System.out.print("No real roots");
        }
    }
}

```