

```
import java.util.Scanner;

class oop1
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);

        double a,b,c,r1,r2,d;

        System.out.println("Enter the values of a,b,c");
        a=sc.nextDouble();
        b=sc.nextDouble();
        c=sc.nextDouble();
        d=(b*b)-(4*a*c);
        if(d<0)
            System.out.println("No real roots for the given quadratic equation");
        else if(d>=0)
        {
            r1=(-b+(Math.sqrt(d)))/(2*a);
            r2=(-b-(Math.sqrt(d)))/(2*a);
            if(d==0)
            {
                System.out.println("Roots are real and equal");
                System.out.printf("The roots are: %.2f and %.2f",r1,r2);
            }
            else
            {
                System.out.println("Roots are real and unequal");
                System.out.printf("The roots are: %.2f and %.2f",r1,r2);
            }
        }
    }
}
```

```
}  
}
```

```
C:\Users\Adithi\Desktop\java_prgs>javac oop1.java  
  
C:\Users\Adithi\Desktop\java_prgs>java oop1  
Enter the values of a,b,c  
1  
-6  
5  
Roots are real and unequal  
The roots are: 5.00 and 1.00  
C:\Users\Adithi\Desktop\java_prgs>java oop1  
Enter the values of a,b,c  
1  
4  
5  
No real roots for the given quadratic equation  
  
C:\Users\Adithi\Desktop\java_prgs>java oop1  
Enter the values of a,b,c  
9  
-6  
1  
Roots are real and equal  
The roots are: 0.33 and 0.33  
C:\Users\Adithi\Desktop\java_prgs>
```