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import java.util.Scanner;

public class LabProgram1 {
    Run | Debug
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println(x:"Enter the coefficients of quadratic equation:");
        int a = sc.nextInt();
        int b = sc.nextInt();
        int c = sc.nextInt();
        double r1, r2;

        if(a == 0){
            System.out.println(x:"Please enter valid value");
            return;
        }
        else{
            int d = b * b - 4 * a * c;
            if(d > 0){
                System.out.println(x:"Real and Distinct roots.");
                r1 = (-b + Math.sqrt(d)) / (2 * a);
                r2 = (-b - Math.sqrt(d)) / (2 * a);
                System.out.println("Roots are: " + r1 + " and " + r2);
            }
        }
    }
}
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    }  
    else if(d < 0){  
        System.out.println(x:"Imaginary roots.");  
        d = Math.abs(d);  
        r1 = (-b + Math.pow(d, b:0.5)) / (2 * a);  
        r2 = (-b - Math.pow(d, b:0.5)) / (2 * a);  
        System.out.println("Roots are: " + r1 + " and " + r2);  
    }  
    else{  
        System.out.println(x:"Real and Equal roots.");  
        r1 = r2 = (-b) / (2 * a);  
        System.out.println("Roots are: " + r1 + " and " + r2);  
    }  
}  
}
```

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Enter the coefficients of quadratic equation:
2
-8
Real and Distinct roots.
Roots are: 3.58113883008419 and 0.41886116991581024
PS C:\Users\Sarim Ali\OneDrive\Desktop\00Ps> cd "c:\Users\Sarim Ali\OneDrive\Desktop\00Ps\" ; if ($?) { javac LabProgram1.java } ; if ($?) {
java LabProgram1 }
Enter the coefficients of quadratic equation:
1
-4
4
Real and Equal roots.
Roots are: 2.0 and 2.0
PS C:\Users\Sarim Ali\OneDrive\Desktop\00Ps> cd "c:\Users\Sarim Ali\OneDrive\Desktop\00Ps\" ; if ($?) { javac LabProgram1.java } ; if ($?) {
java LabProgram1 }
Enter the coefficients of quadratic equation:
1
1
1
Imaginary roots.
Roots are: 0.3660254037844386 and -1.3660254037844386
PS C:\Users\Sarim Ali\OneDrive\Desktop\00Ps> 
```