```
#import java.util.*;
#import java.lang.*;
class Quadratic {
    public static double checkD (double a, double b, double c) {
        double D;
        D = (b*b) - (4*a*c);
        D = Math.sqrt((b*b)-(4*a*c));
        double temp,D;
        temp = ((b*b) - (4*a*c));
        if (temp == 0)
        System.out.println("Given equation has real & same roots");
        else if (temp >0)
        System.out.println("Given equation has real & distinct roots");
        else
        System.out.println("Given equation has no real roots");
        if (temp >=0)
        D= Math.sqrt(temp);
        else D= Math.sqrt(-temp);
        return temp;
    }
public static void printRoots(double a, double b, double D){
    if (D >= 0)
        double d= Math.sqrt(D);
    else d= Math.sqrt(-temp);
    double root1, root2; double temp1;
    if (D>=0){
        root1= ((-b+ d)/(2*a));
        root2=((-b- d)/(2*a));
    } System.out.println("R1 = " + root1 + ", R2= " + root2); }
    else {
        temp1= ((-b)/(2*a));
}
```

```
        System.out.println("Roots are
        System.out.println("R1= " + temp1 + " +" + d + "i");
        System.out.println("R2= " + temp1 + " -" + d + "i");
        }
}

public static void main(String[] args) {
  Scanner s= new Scanner(System.in);
  double a, b, c, D;
  System.out.println("Enter values of a, b, c respectively in
                      equation  ax^2+bx+c ");
  a= s.nextDouble();
  b= s.nextDouble();
  c= s.nextDouble();
  D= checkD(a, b, c);
  printRoots(a,b,D);
}
}
```