```
else
{
    r1 = -b/(2*a);
    r2 = Math.abs(Math.sqrt(-D)/(2*a));
    System.out.printf("r1 = %.3f + %.3f
                       i\n", r1, r2);
    System.out.printf("r2 = %.3f - %.3f
                       i\n", r2, r2);
}
}
```

Output:

Case 1: Enter a, b, & c:
r1 = -1.000 +1.732i
r2 = -1.000 +1.732i

Case 2: Enter a, b & c: 1 3 1
r1 = -0.382
r2 = -2.618

12/12/23

LRA 12-12-23

Q. WAP to find the roots of a quadratic equation.

→

```
import java.util.*;
class QuadraticEquation
{
  public static void main(String args[])
  {
    Scanner s = new Scanner(System.in);
    double a, b, c;
    double D;
    double r1, r2;
    System.out.printf("Enter a, b & c:");
    a = s.nextDouble();
    b = s.nextDouble();
    c = s.nextDouble();
    D = b*b - 4*a*c;
    if (D >= 0)
    {
      r1 = (-b + Math.sqrt(D)) / (2*a);
      r2 = (-b - Math.sqrt(D)) / (2*a);
      System.out.printf("r1 = %.3f\n", r1);
      System.out.printf("r2 = %.3f\n", r2);
    }
```