3) Quadratic

```
import java.util.*;
import java.lang.Math;

class Quad {
    double a, b, c, r1, r2, r, i;
    void input()
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter 1st co-eff");
        a = sc.nextInt();
        SOPln("Enter 2nd coeff");
        b = sc.nextInt();
        SOPln("Enter 3rd coeff");
        c = sc.nextInt();
    }

    void calc()
    {
        double d = b*b - 4*a*c;
        if (d > 0) {
```

```
        r1 = (-b + Math.sqrt(d)) / (2*a);
        r2 = (-b - Math.sqrt(d)) / (2*a);
        SOPln("The roots are real & distinct = "
                + r1 + " and " + r2);
    }
else if (d < 0) {
        r = -b / (2*a);
        r = Math.sqrt(-d) / (2*a);
        SOPln("The roots are imaginary & distinct:"
                r + "+" + i + "and" + r + " " + it);

else {
    r = -b / (2*a);
    SOPln("The roots are real & equal : " + r);
    }
}
}
    class Quad {
        public static void main (String args[]) {
            Quad q = new Quad();
            q.input();
            q.calc();
        }
    }
```

O/P

Enter 1st coeff

1

Enter 2nd coeff

2

Enter 3rd coeff

1

Roots are real & equal : -1.0