https://panchalprogrammingacademy.github.io/course-problem-deck/#/problem/5fb264580f51d400177e5968

Roots of quadratic equation

50 POINTS

Given a quadratic equation find out the roots of the quadratic equation.
Note that if $ax^2 + bx + c = 0$ is a quadratic equation with a being non-zero then roots of the equation can be computed as:
$roots = \frac{(-b \pm \sqrt{b^2 - 4ac})}{2a}$
And based on the value of the discriminant i.e. $D = \sqrt{b^2 - 4ac}$ we have the following cases:

1. If D = 0 then roots are real and equal
2. If D > 0 then roots are real and unequal
3. If D < 0 then roots are imaginary

Input format:
A single line of input containing three integers denoting the values of a, b and c respectively.

Output format:
Roots of the quadratic equation $ax^2 + bx + c = 0$ separated by a space.

Constraints:
(i) a is non-zero
(ii) a, b, c are integers and it is guaranteed that there will be no overflow.

Test Case - 1
1 2 1
-1 -1
Explanation:
Given a = 1, b = 2 and c = 1 we have the following equation:
$x^2 + 2x + 1 = 0 \implies (x + 1)^2 = 0 \implies x = -1$
Both the roots are real and equal

Test Case - 2
1 -5 6
3 2
Explanation:
Given a = 1, b = -5 and c = 6 we have the following equation:
$x^2 - 5x + 6 = 0 \implies (x - 3)(x - 2) = 0 \implies x = 3, 2$
Both the roots are real and unequal

Test Case - 3
1 0 4
0+2i 0-2i
Explanation:
Given a = 1, b = 0 and c = 4 we have the following equation:
$x^2 + 4 = 0 \implies x^2 = -4 \implies x = \pm\sqrt{-4} \implies x = \pm 2i$

NOTE:
(i) use %g format specifier to print the resulting numbers.
(ii) you need not to perform any complex number calculations just follow up the cases.