# **Problem Statement:**

Quadratic equation is an equation with degree 2 in the form ax2 +bx + c = 0, where a, b, c are the coefficients. Write a program to solve a quadratic equation.

Your output will be decided based on the value of the discriminant (which is b2 -4\*a\*c),

* If the discriminant value is 0, then both the roots will be equal. Print the value of the root obtained.
* If the discriminant is greater than 0, then both of the roots are real and distinct. Print both the values.
* If the discriminant is less than 0, then the equation will have no real roots. Print a message which conveys that the roots are not not real.

Sample I/O table:

Please refer the given table for sample input values and its corresponding output.

| **Input** | **Output** |
| --- | --- |
| a=1, b=4, c=4 | The root is -2.0 |
| a=2, b=5, c=2 | The roots are -2.0 and -0.5 |
| a=1, b=4, c=6 | The equations does not have real roots. |

Note: Check the project using SonarLint to maintain the coding standards. Ignore the violations which occur due to "System.out" statements.