

## 3024. Type of Triangle

Solved ✓

Easy

Topics

Companies

Hint

You are given a **0-indexed** integer array `nums` of size `3` which can form the sides of a triangle.

- A triangle is called **equilateral** if it has all sides of equal length.
- A triangle is called **isosceles** if it has exactly two sides of equal length.
- A triangle is called **scalene** if all its sides are of different lengths.

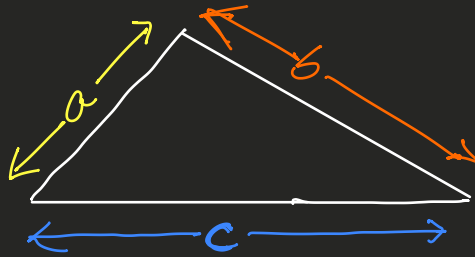
Return a string representing the type of triangle that can be formed or `"none"` if it **cannot** form a triangle.

## Example 1:

Input: `nums = [3,3,3]`

Output: `"equilateral"`

Explanation: Since all the sides are of equal length, therefore, it will form an equilateral triangle.

Question:

- Given, 3 sides of the triangle  $-(a, b, c)$
- Basically you need to tell the type of triangle if at all it forms a triangle.



## Approach:

I would say this is pretty straight forward and Basic math.

The question is more about recalling the elementary Maths.

### Facts about a triangle

- 1) Sum of any two sides always  $>$  3<sup>rd</sup> side.
- 2) Equilateral — All sides equal.
- 3) Isosceles — Exactly two sides equal
- 4) Scalene — All sides are of different length



Coding: Couple of if-checks does the job. ✓✓

Only catch is that you need to check if the triangle is valid before checking for type of  $\Delta$ 's.

