

3024. Type of Triangle II

Description

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.

Example 2:

Input: `nums = [3,4,5]`

Output: `"scalene"`

Explanation:

`nums[0] + nums[1] = 3 + 4 = 7`, which is greater than `nums[2] = 5`.

`nums[0] + nums[2] = 3 + 5 = 8`, which is greater than `nums[1] = 4`.

`nums[1] + nums[2] = 4 + 5 = 9`, which is greater than `nums[0] = 3`.

Since the sum of the two sides is greater than the third side for all three cases, therefore, it can form a triangle.

As all the sides are of different lengths, it will form a scalene triangle.

Constraints:

- `nums.length == 3`
- `1 <= nums[i] <= 100`

