

# 2586. Longest Square Streak in an Array

## Difficulty : Medium

<https://leetcode.com/problems/longest-square-streak-in-an-array>

You are given an integer array `nums`. A subsequence of `nums` is called a **square streak** if:

- The length of the subsequence is at least 2, and
- **after** sorting the subsequence, each element (except the first element) is the **square** of the previous number.

Return *the length of the **longest square streak** in `nums`, or return -1 if there is no **square streak**.*

A **subsequence** is an array that can be derived from another array by deleting some or no elements without changing the order of the remaining elements.

### Example 1:

**Input:** `nums = [4,3,6,16,8,2]`

**Output:** 3

**Explanation:** Choose the subsequence `[4,16,2]`. After sorting it, it becomes `[2,4,16]`.

-  $4 = 2 * 2$ .

-  $16 = 4 * 4$ .

Therefore, `[4,16,2]` is a square streak.

It can be shown that every subsequence of length 4 is not a square streak.

### Example 2:

**Input:** `nums = [2,3,5,6,7]`

**Output:** -1

**Explanation:** There is no square streak in `nums` so return -1.

### Constraints:

- $2 \leq \text{nums.length} \leq 10^5$
- $2 \leq \text{nums}[i] \leq 10^5$