

2126. Destroying Asteroids

Description

You are given an integer `mass`, which represents the original mass of a planet. You are further given an integer array `asteroids`, where `asteroids[i]` is the mass of the i^{th} asteroid.

You can arrange for the planet to collide with the asteroids in **any arbitrary order**. If the mass of the planet is **greater than or equal to** the mass of the asteroid, the asteroid is **destroyed** and the planet **gains** the mass of the asteroid. Otherwise, the planet is destroyed.

Return `true` if **all** asteroids can be destroyed. Otherwise, return `false`.

Example 1:

Input: `mass = 10, asteroids = [3,9,19,5,21]`

Output: `true`

Explanation: One way to order the asteroids is `[9,19,5,3,21]`:

- The planet collides with the asteroid with a mass of 9. New planet mass: $10 + 9 = 19$
- The planet collides with the asteroid with a mass of 19. New planet mass: $19 + 19 = 38$
- The planet collides with the asteroid with a mass of 5. New planet mass: $38 + 5 = 43$
- The planet collides with the asteroid with a mass of 3. New planet mass: $43 + 3 = 46$
- The planet collides with the asteroid with a mass of 21. New planet mass: $46 + 21 = 67$

All asteroids are destroyed.

Example 2:

Input: `mass = 5, asteroids = [4,9,23,4]`

Output: `false`

Explanation:

The planet cannot ever gain enough mass to destroy the asteroid with a mass of 23.

After the planet destroys the other asteroids, it will have a mass of $5 + 4 + 9 + 4 = 22$.

This is less than 23, so a collision would not destroy the last asteroid.

Constraints:

- $1 \leq \text{mass} \leq 10^5$
- $1 \leq \text{asteroids.length} \leq 10^5$
- $1 \leq \text{asteroids}[i] \leq 10^5$

