5969. Destroying Asteroids

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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 ith 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`.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

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 <= mass <= 10^5`
- `1 <= asteroids.length <= 10^5`
- `1 <= asteroids[i] <= 10^5`

JavaScript ▾

```javascript
const asteroidsDestroyed = (mass, a) => {
    a.sort((x, y) => x - y);
    // pr(a);
    let n = a.length, sum = mass;
    for (let i = 0; i < n; i++) {
        // pr(sum, a[i]);
        if (sum >= a[i]) {
            sum += a[i];
        } else {
            return false;
        }
    }
    // pr("total", sum);
    return true;
};
```

☐ **Custom Testcase**   Use Example Testcases

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Submission Result: Accepted (/submissions/detail/611169053/) ❓   More Details ❯ (/submissions/detail/611169053/)

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