

5831. Maximum Number of Weeks for Which You Can Work

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There are n projects numbered from 0 to $n - 1$. You are given an integer array `milestones` where each `milestones[i]` denotes the number of milestones the i^{th} project has.

You can work on the projects following these two rules:

- Every week, you will finish **exactly one** milestone of **one** project. You **must** work every week.
- You **cannot** work on two milestones from the same project for two **consecutive** weeks.

User Accepted:	1683
User Tried:	3775
Total Accepted:	1719
Total Submissions:	7496
Difficulty:	Medium

Once all the milestones of all the projects are finished, or if the only milestones that you can work on will cause you to violate the above rules, you will **stop working**. Note that you may not be able to finish every project's milestones due to these constraints.

Return the **maximum** number of weeks you would be able to work on the projects without violating the rules mentioned above.

Example 1:

Input: `milestones = [1,2,3]`

Output: 6

Explanation: One possible scenario is:

- During the 1st week, you will work on a milestone of project 0.
 - During the 2nd week, you will work on a milestone of project 2.
 - During the 3rd week, you will work on a milestone of project 1.
 - During the 4th week, you will work on a milestone of project 2.
 - During the 5th week, you will work on a milestone of project 1.
 - During the 6th week, you will work on a milestone of project 2.
- The total number of weeks is 6.

Example 2:

Input: milestones = [5,2,1]

Output: 7

Explanation: One possible scenario is:

- During the 1st week, you will work on a milestone of project 0.
- During the 2nd week, you will work on a milestone of project 1.
- During the 3rd week, you will work on a milestone of project 0.
- During the 4th week, you will work on a milestone of project 1.
- During the 5th week, you will work on a milestone of project 0.
- During the 6th week, you will work on a milestone of project 2.
- During the 7th week, you will work on a milestone of project 0.

The total number of weeks is 7.

Note that you cannot work on the last milestone of project 0 on 8th week because it would violate the constraint. Thus, one milestone in project 0 will remain unfinished.

Constraints:

- $n == \text{milestones.length}$
- $1 \leq n \leq 10^5$
- $1 \leq \text{milestones}[i] \leq 10^9$

JavaScript



```
1 const numberOfWeeks = (a) => {  
2   a.sort((x, y) => y - x);  
3   let rsum = a.reduce((x, y) => x + y) - a[0];  
4   a[0] = Math.min(a[0], rsum + 1);  
5   return a.reduce((x, y) => x + y);  
6 };
```

☐ Custom Testcase

Use Example Testcases

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