Problem 274: H-Index

Problem Information

Difficulty: Medium
Acceptance Rate: 40.85%
Paid Only: No
Tags: Array, Sorting, Counting Sort

Problem Description

Given an array of integers `citations` where `citations[i]` is the number of citations a researcher received for their `ith` paper, return _the researcher 's h-index_.

According to the [definition of h-index on Wikipedia](https://en.wikipedia.org/wiki/H-index): The h-index is defined as the maximum value of `h` such that the given researcher has published at least `h` papers that have each been cited at least `h` times.

Example 1:

Input: citations = [3,0,6,1,5] **Output:** 3 **Explanation:** [3,0,6,1,5] means the researcher has 5 papers in total and each of them had received 3, 0, 6, 1, 5 citations respectively. Since the researcher has 3 papers with at least 3 citations each and the remaining two with no more than 3 citations each, their h-index is 3.

Example 2:

Input: citations = [1,3,1] **Output:** 1

Constraints:

* `n == citations.length` * `1 <= n <= 5000` * `0 <= citations[i] <= 1000`

Code Snippets

C++:

```
class Solution {
public:
int hIndex(vector<int>& citations) {

}
};
```

Java:

```
class Solution {
public int hIndex(int[] citations) {

}
}
```

Python3:

```
class Solution:
def hIndex(self, citations: List[int]) -> int:
```