

Find H-Index

Difficulty: Medium

Accuracy: 53.4%

Submissions: 30K+

Points: 4

Given an integer array **citations**[], where **citations[i]** is the number of citations a researcher received for the i^{th} paper. The task is to find the **H-index**.

H-Index is the **largest** value such that the researcher has **at least H papers** that have been cited **at least H times**.

Examples:

Input: citations[] = [3, 0, 5, 3, 0]

Output: 3

Explanation: There are at least 3 papers (3, 5, 3) with at least 3 citations.

Input: citations[] = [5, 1, 2, 4, 1]

Output: 2

Explanation: There are 3 papers (with citation counts of 5, 2, and 4) that have 2 or more citations. However, the H-Index cannot be 3 because there aren't 3 papers with 3 or more citations.

```
1 // } Driver Code Ends
31
32 class Solution {
33     static int hIndex(int[] citations) {
34         int n = citations.length;
35         int[] freq = new int[n + 1];
36         for (int i = 0; i < n; i++) {
37             if (citations[i] >= n)
38                 freq[n] += 1;
39             else
40                 freq[citations[i]] += 1;
41         }
42         int idx = n;
43         int s = freq[n];
44         while (s < idx) {
45             idx--;
46             s += freq[idx];
47         }
48         return idx;
49     }
50 }
```

