274. H-Index

Description | Hints | Submissions | Discuss | Solution

Pick One

Given an array of citations (each citation is a non-negative integer) of a researcher, write a function to compute the researcher's h-index.

According to the definition of h-index on Wikipedia: "A scientist has index *h* if *h* of his/her *N* papers have **at least** *h* citations each, and the other *N* − *h* papers have **no more than** *h* citations each."

Example:

```
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, her h-index is 3.
```

Note: If there are several possible values for *h*, the maximum one is taken as the h-index.

Seen this question in a real interview before? Yes No

```java
/*
 * 先排序，然后count是表示大于等于citations[i]的个数
 * 因为要找最大的，当count >= citations[i]意思表示就
 * 满足了条件，就是一个学者的H-index意思是有H篇论文的引用量
 * 都在H以上，H越大越好，比如说3 0 6 1 5 排序后
 * 0 1 3 5 6   一开始count=0，citations[i] = 6，显然6不满足
 * 一直到count = 3，citations[i] = 1，满足了，所以取最大值，3，因为假如
 *  citations[i] = 1也是满足的
 */
public class L274 {
    public int hIndex(int[] citations) {
        int size = citations.length;
        if(size <= 0)
            return 0;
        Arrays.sort(citations);
        int count = 0;

        for(int i = size - 1; i >= 0; i --) {
            if(count >= citations[i]) {
                return Math.max(count, citations[i]);
            }
            count ++;
        }
        return count;
    }
}
```