275. H-Index II

Hint

Given an array of integers citations where citations[i] is the number of citations a researcher received for their ith paper and citations is sorted in ascending order, return the researcher's h-index.

According to the definition of h-index on Wikipedia: 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.

You must write an algorithm that runs in logarithmic time.

Example 1:

- **Input:** citations = [0,1,3,5,6]
- **Output:** 3
- **Explanation:** [0,1,3,5,6] means the researcher has 5 papers in total and each of them had received 0, 1, 3, 5, 6 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 = [1,2,100]
- **Output:** 2

Constraints:

- n == citations.length
- $1 <= n <= 10^5$
- 0 <= citations[i] <= 1000
- citations is sorted in ascending order.