## 274. H-Index

Given an array of integers citations where citations[i] is the number of citations a researcher received for their i<sup>th</sup> paper, return *the researcher's h-index*.

According to the <u>definition of h-index on Wikipedia</u>: 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