**H-INDEX**

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.

**CODE**

class Solution {

public:

    int hIndex(vector<int>& citations) {

         sort(citations.rbegin(), citations.rend());

        int h = 0;

        for (int i = 0; i < citations.size(); i++)

        {

            if (citations[i] >= i + 1)

            {

                h = i + 1;

            }

            else

            {

                break;

            }

        }

        return h;

    }

};

**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