

H-Index, H-Index II

H-Index



Input → nums = [3, 0, 6, 1, 5]

Citations

Unsorted

H-Index II

Input → nums → [0, 1, 3, 5, 6]

Sorted

Step 1 Create an array of size = num.length + 1

nums = [3, 0, 6, 1, 5] ← Citations

papers = [0, 0, 0, 0, 0, 0]

Step 2 Iterate nums/citations array & fill papers array such that we increase counts in papers array at index = citations[i] where $i = 0$ to $i < n$ if citations[i] $\geq n$ then we increase count in papers array for index = n

for (int i = 0; i < n; i++) {

papers[i] ← to be increased from 0 to

}

papers =

0	1	2	3	4	5
0	0	0	1	0	0

3	0	6	1	5
---	---	---	---	---

0	1	2	3	4	5
1	0	0	1	0	0

0	1	2	3	4	5
1	0	0	1	0	1

0	1	2	3	4	5
1	1	0	1	0	1

0	1	2	3	4	5
1	1	0	1	0	2

↑
i

↑
i

↑
i

↑
i

↑
i

Step 3 Papers array looks like below

1	1	0	1	0	2
---	---	---	---	---	---



Step 4 Iterate for loop from last & count = 0

```
int count = 0
```

```
for (i = paper.length - 1; i >= 0; i--) {
```

```
    count += papers[i];
```

```
    if (count >= i) {
```

```
        return i; ← This gives the maximum
```

```
    }
```

H-Index

```
}
```

Note: For H-Index II problem we can use the same approach. only.