

75 Days of Code

Day 67

Problem no : Leetcode 338

Problem Title : Counting Bits

Problem type : Bit manipulation

Given an integer n , return an array ans of length $n + 1$ such that for each i ($0 \leq i \leq n$), $ans[i]$ is the number of 1's in the binary representation of i .

Example 1:

Input: $n = 2$

Output: $[0,1,1]$

Explanation:

0 --> 0

1 --> 1

2 --> 10

Example 2:

Input: $n = 5$

Output: $[0,1,1,2,1,2]$

Explanation:

0 --> 0

1 --> 1

2 --> 10

3 --> 11

4 --> 100

5 --> 101

Constraints:

$0 \leq n \leq 105$

```
function countBits(n: number): number[] {  
    let ans = [];  
    for(let num = 0; num < n + 1; num++){  
        let temp = num;  
        let count = 0;  
        while(temp){  
            if (temp & 1) {  
                count++;  
            }  
            temp = temp >> 1;  
            console.log("temp=", temp)  
        }  
        ans.push(count)  
    }  
    return ans;  
};
```

testcase Result

Accepted

Runtime

76 ms

Beats 61.95% of users with TypeScript

Details

Memory

49.29 MB

Beats 69.12% of users with TypeScript

