

75 Days of Code

Day 53

Problem no : 374.

Problem Title : Guess Number Higher or Lower

Problem type : Binary Search

We are playing the Guess Game. The game is as follows:

I pick a number from 1 to n. You have to guess which number I picked.

Every time you guess wrong, I will tell you whether the number I picked is higher or lower than your guess.

You call a pre-defined API `int guess(int num)`, which returns three possible results:

-1: Your guess is higher than the number I picked (i.e. $\text{num} > \text{pick}$).

1: Your guess is lower than the number I picked (i.e. $\text{num} < \text{pick}$).

0: your guess is equal to the number I picked (i.e. $\text{num} == \text{pick}$).

Return the number that I picked.

Example 1:

Input: $n = 10$, $\text{pick} = 6$

Output: 6

Example 2:

Input: $n = 1$, $\text{pick} = 1$

Output: 1

Example 3:

Input: n = 2, pick = 1

Output: 1

```
function guessNumber(n: number): number {
    let start = 0;
    let end = n;
    while(start <= end){
        let mid = Math.floor( start + (end - start) / 2);
        if(guess(mid) === 0){
            return mid;
        } else if(guess(mid) < 0){
            end = mid - 1;
        } else{
            start = mid + 1;
        }
    }
    return -1;
};
```

✓ Accepted



Runtime

Details

49 ms

Beats 86.08% of users with TypeScript

Memory

42.83 MB

Beats 40.34% of users with TypeScript

