

268. Missing Number

Solved

Easy

Topics

Companies

Given an array `nums` containing `n` distinct numbers in the range `[0, n]`, return *the only number in the range that is missing from the array*.

Example 1:

Input: `nums = [3,0,1]`

Output: 2

Explanation: `n = 3` since there are 3 numbers, so all numbers are in the range `[0,3]`. 2 is the missing number in the range since it does not appear in `nums`.

Example 2:

Input: `nums = [0,1]`

Output: 2

Explanation: `n = 2` since there are 2 numbers, so all numbers are in the range `[0,2]`. 2 is the missing number in the range since it does not appear in `nums`.

</> Code

C++  Auto

```
1 class Solution
2 {
3     public:
4     int missingNumber(vector<int>& nums)
5     {
6         int res=0;
7         sort(nums.begin(), nums.end());
8         for (int i=0;i<nums.size();i++)
9         {
10             if (i!=nums[i])
11             {
12                 res=i;
13                 break;
14             }
15             else
16             {
17                 res=i+1;
18             }
19         }
20         return res;
21     }
22 };
```

Saved to local

121. Best Time to Buy and Sell Stock

Solved

Easy Topics Companies

You are given an array `prices` where `prices[i]` is the price of a given stock on the i^{th} day.

You want to maximize your profit by choosing a **single day** to buy one stock and choosing a **different day in the future** to sell that stock.

Return the maximum profit you can achieve from this transaction. If you cannot achieve any profit, return 0.

Example 1:

Input: `prices = [7,1,5,3,6,4]`

Output: 5

Explanation: Buy on day 2 (price = 1) and sell on day 5 (price = 6), profit = 6-1 = 5.

Note that buying on day 2 and selling on day 1 is not allowed because you must buy before you sell.

Example 2:

Input: `prices = [7,6,4,3,1]`

C++ Auto

```
1 class Solution
2 {
3     public:
4     int maxProfit(vector<int>& prices)
5     {
6         if (prices.size()==0)
7         {
8             return 0;
9         }
10        int fprice=prices[0];
11        int profit=0;
12        for (int i=1;i<prices.size();i++)
13        {
14            if (prices[i]<fprice)
15            {
16                fprice=prices[i];
17            }
18            else
19            {
20                profit=max(profit, prices[i]-fprice);
21            }
22        }
23        return profit;
24    }
```

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Ln 6, Col 26