

121. Best Time to Buy and Sell Stock (Easy)

You are given an integer array `prices` where `prices[i]` is the price of NeetCode on the `i`th day.

You may choose a single day to buy one NeetCode and choose a different day in the future to sell it.

Return the maximum profit you can achieve. You may choose to not make any transactions, in which case the profit would be `0`.

Example 1:

Input: `prices = [10,1,5,6,7,1]`

Output: 6

Explanation: Buy `prices[1]` and sell `prices[4]`, `profit = 7 - 1 = 6`.

Example 2:

Input: `prices = [10,8,7,5,2]`

Output: 0

Explanation: No profitable transactions can be made, thus the max profit is 0.

Constraints:

- `1 <= prices.length <= 100`
- `0 <= prices[i] <= 100`

思路：雙變數儲存暫時性最高最低迭代比較

做法

```

class Solution {
public:
    int maxProfit(vector<int>& prices) {
        int ans=0,tmph=prices[0],tmpl=prices[0];
        for(int i=0;i<prices.size();i++){
            if(prices[i]>tmph){
                tmph = prices[i];
                ans = (ans > tmph - tmpl) ? ans :tmph - tmpl;
            }
            else if(prices[i]<tmpl){
                tmph= prices[i];
                tmpl= prices[i];
            }
        }
        return ans;
    }
};

```