

121. Best Time to Buy and Sell Stock

Easy 10485 419 Add to List Share

You are given an array `prices` where `prices[i]` is the price of a given stock on the  $i^{\text{th}}$  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]`  
**Output:** `0`  
**Explanation:** In this case, no transactions are done and the max profit = 0.

Constraints:





- `1 <= prices.length <= 105`
- `0 <= prices[i] <= 104`

Accepted 1,507,618 Submissions 2,870,397

Seen this question in a real interview before? 

Yes

No

- Companies  
- Related Topics 
- Similar Questions 

```
1 class Solution {
2     public int maxProfit(int[] prices) {
3
4     }
5 }
```