[13/03, 12:00 am] Thivyakarthi: 121. Best Time to Buy and Sell Stock

Description

Hints

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Solution

You are given an array prices where prices[i] is the price of a given stock on the ith 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

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Python3

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Class Solution:

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Def maxProfit(self,prices):

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Left = 0 #Buy

5

6

Right = 1 #Sell

7

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Max\_profit = 0

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While right < len(prices):

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currentProfit = prices[right] – prices[left]

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If prices[left] < prices[right]:

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Max\_profit =max(currentProfit,max\_profit)

17

18

Else:

19

20

Left = right

21

22

Right += 1

23

24

Return max\_profit

25

Custom Testcase( Contribute )

Run Code: Finished

[13/03, 12:01 am] Thivyakarthi: Run Code Result:

Your input

[7,1,5,3,6,4]

Your answer

5

Expected answer

5