Brute:

from typing import List

def maxProfit(arr: List[int]) -> int:

maxPro = 0

n = len(arr)

for i in range(n):

for j in range(i + 1, n):

if arr[j] > arr[i]:

maxPro = max(arr[j] - arr[i], maxPro)

return maxPro

if \_\_name\_\_ == "\_\_main\_\_":

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

maxPro = maxProfit(arr)

print("Max profit is: ", maxPro)

Optimal:

def bestTimeToBuyAndSellStock(prices: [int]) -> int:

    profit=0

    buy=prices[0]

    for sell in range(1,len(prices)):

        if prices[sell]-buy>0:

            profit=max(profit,prices[sell]-buy)

        elif  prices[sell]-buy<0:

            buy=prices[sell]

    return profit