Hw5q3

Python code chat gpt

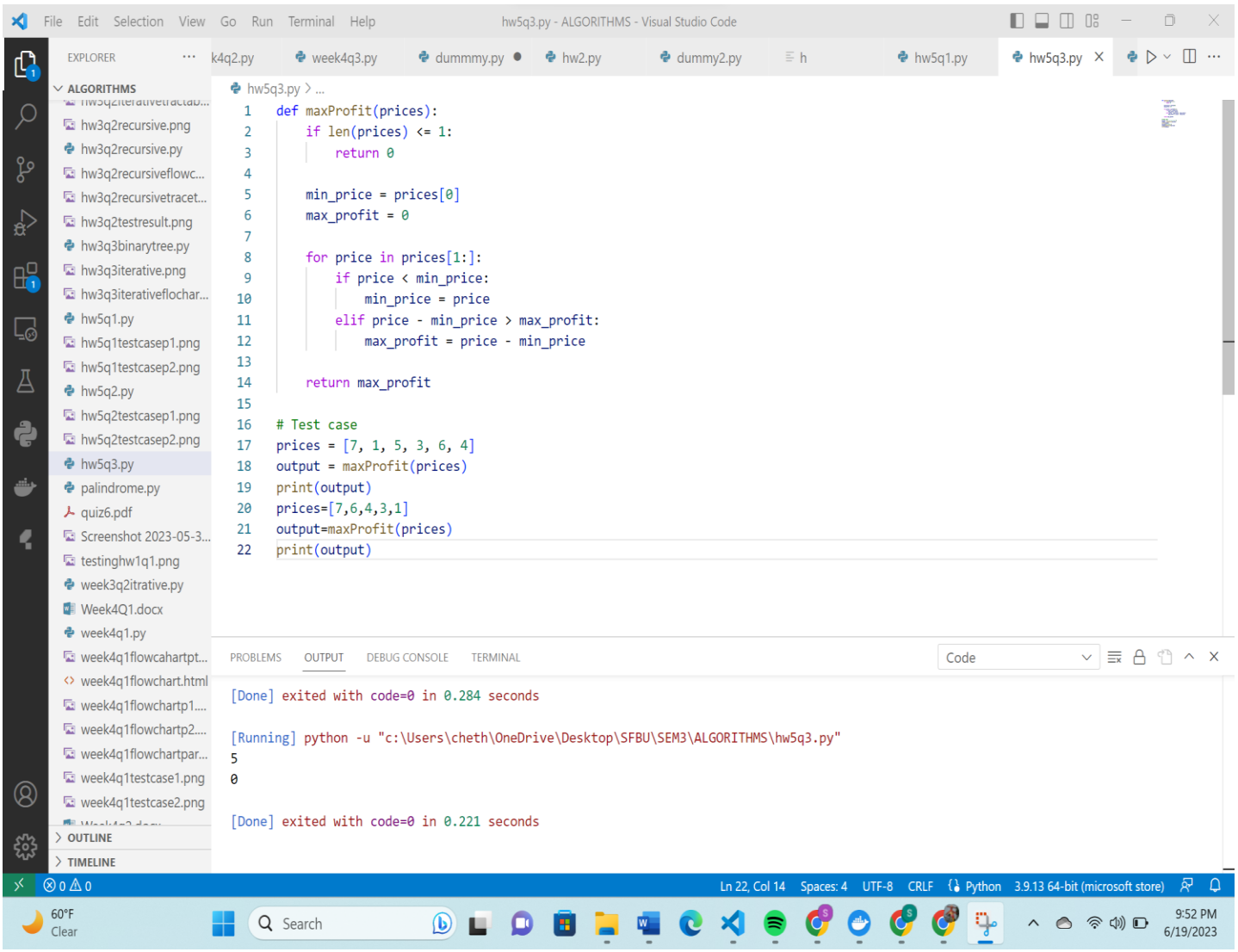
```python
def maxProfit(prices):
    if len(prices) <= 1:
        return 0

    min_price = prices[0]
    max_profit = 0

    for price in prices[1:]:
        if price < min_price:
            min_price = price
        elif price - min_price > max_profit:
            max_profit = price - min_price

    return max_profit

# Test case
prices = [7, 1, 5, 3, 6, 4]
output = maxProfit(prices)
print(output)
```


File Edit Selection View Go Run Terminal Help
hw5q3.py - ALGORITHMS - Visual Studio Code
EXPLORER
ALGORITHMS
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Week4Q1.docx
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week4q1testcase2.png
OUTLINE
TIMELINE
k4q2.py
week4q3.py
dummmy.py
hw2.py
dummy2.py
h
hw5q1.py
hw5q3.py
hw5q3.py > ...
1 def maxProfit(prices):
2 if len(prices) <= 1:
3 return 0
4
5 min_price = prices[0]
6 max_profit = 0
7
8 for price in prices[1:]:
9 if price < min_price:
10 min_price = price
11 elif price - min_price > max_profit:
12 max_profit = price - min_price
13
14 return max_profit
15
16 # Test case
17 prices = [7, 1, 5, 3, 6, 4]
18 output = maxProfit(prices)
19 print(output)
20 prices=[7,6,4,3,1]
21 output=maxProfit(prices)
22 print(output)
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
Code
[Done] exited with code=0 in 0.284 seconds
[Running] python -u "c:\Users\cheth\OneDrive\Desktop\SFBU\SEM3\ALGORITHMS\hw5q3.py"
5
0
[Done] exited with code=0 in 0.221 seconds
Ln 22, Col 14
Spaces: 4
UTF-8
CRLF
Python
3.9.13 64-bit (microsoft store)
60°F
Clear
Search
9:52 PM
6/19/2023