

Week5-Q3

```
def maxProfit(prices):  
    if not prices:  
        return 0  
  
    min_price = prices[0]  
    max_profit = 0  
  
    for price in prices:  
        min_price = min(min_price, price)  
  
        current_profit = price - min_price  
  
        max_profit = max(max_profit, current_profit)  
  
    return max_profit  
  
prices = [7, 1, 5, 3, 6, 4]  
output = maxProfit(prices)  
print("Output:", output)  
  
prices = [7,6,4,3,1]  
output = maxProfit(prices)  
print("Output:", output)
```

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```
1 def maxProfit(prices):
2     if not prices:
3         return 0
4
5
6     min_price = prices[0]
7     max_profit = 0
8
9
10    for price in prices:
11
12        min_price = min(min_price, price)
13
14
15        current_profit = price - min_price
16
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

/usr/local/bin/python3 /Users/rakesh_kasha/Desktop/SFBU/sem_3/Algorithms/week5-Q3.py

(base) rakesh_kasha@Rakesh-kashas-MacBook-Pro ~ % /usr/local/bin/python3 /Users/rakesh_kasha/Desktop/SFBU/sem_3/Algorithms/week5-Q3.py

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(base) rakesh_kasha@Rakesh-kashas-MacBook-Pro ~ % /usr/local/bin/python3 /Users/rakesh_kasha/Desktop/SFBU/sem_3/Algorithms/week5-Q3.py

Output: 5

Output: 0

(base) rakesh_kasha@Rakesh-kashas-MacBook-Pro ~ %

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```
16
17
18     max_profit = max(max_profit, current_profit)
19
20     return max_profit
21
22
23 prices = [7, 1, 5, 3, 6, 4]
24 output = maxProfit(prices)
25 print("Output:", output)
26
27 prices = [7,6,4,3,1]
28 output = maxProfit(prices)
29 print("Output:", output)
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PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

/usr/local/bin/python3 /Users/rakesh_kasha/Desktop/SFBU/sem_3/Algorithms/week5-Q3.py

(base) rakesh_kasha@Rakesh-kashas-MacBook-Pro ~ % /usr/local/bin/python3 /Users/rakesh_kasha/Desktop/SFBU/sem_3/Algorithms/week5-Q3.py

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Output: 5

Output: 0

(base) rakesh_kasha@Rakesh-kashas-MacBook-Pro ~ %

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