

(7)

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

Can hold one stock any time  
Each day buy/sell stock (on same day u can buy & sell the stock)

Maximum Subarray is for 1-time buy & sell that could be greedy approach?

1g one approach is:

7, 1, 5, 3, 6, 4  
↑    ↑    ↑    ↑       ↑  
B                    S

$4 - 7 = -3$  // We need profit move B pointer

$4 - 1 = 3$  // move S pointer  $max = 3$

$6 - 1 = 5$  // move S pointer  $max = 5$

$3 - 1 = 2$  // move B pointer " "

$3 - 5 = -2$  // move B pointer " "

$3 - 3 = 0$  // move S pointer to [n]

$4 - 3 = 1$  // move S pointer  $max + 1 = 6$

the right approach should be:

0	1	2	3	4	5
7	1	5	3	6	4
↑	↑	↑			
B	S				

$$7-7 = -6 \parallel B=S, S++$$

$$5-1 = 4 \parallel \text{max} = 4, B++, S++$$

$$3-5 = -2 \parallel B=S, S++$$

$$6-3 = 3 \parallel \text{max} + 3 = 7$$

$$4-6 = -2 \parallel B=S, S++$$

$$\text{max} = 7$$

$O(n)$  Time

$O(1)$  Space

Two Ptr with Max Subarray Approach?

↳ Certainly learned from it