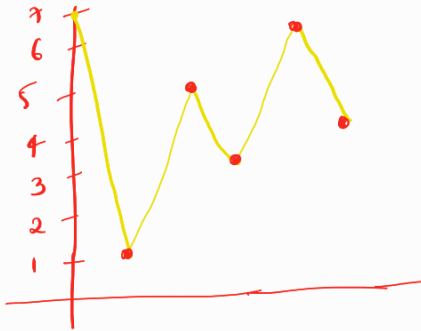


Buy & Sell Stocks

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

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.



$$\text{Profit} = \text{selling price} - \text{buying price}$$

To maximize profit
This should be
best.

↳ Buying price = $+\infty$
↳ we need to get
minimum value.

Day 1 \Rightarrow as it's day 1 we can't sell
any thing.

$$B.P = 7$$

Day 2 \Rightarrow on 2nd day, stock price
is 1, buying price.

\Downarrow
we can't buy & sell
the same day,

so it will be minimum of
before days.

Day 3 \Rightarrow sp \rightarrow 5
BP \rightarrow 1
Profit = 4.

Day 4 \Rightarrow sp \rightarrow 3, BP \rightarrow 1, 2

5 \Rightarrow 6, 1, 5

6 \Rightarrow

\hookrightarrow B.P = 7, S.P = 1
next step \Rightarrow BP = $\min(B.P, \text{today's price})$