## Best time to buy and sell stock

```
Friday, September 13, 2024
                            1:52 PM
```

My code:

```
class Solution {
 public int maxProfit(int[] prices) {
     int max=0;
     int n=prices.length;
     for(int i=0; i< n-1; i++){
          for(int j=i+1; j<n; j++){</pre>
              if(j>i && prices[j]-prices[i]>max){
                  max=prices[j]-prices[i];
              }
     }
     return max;
 }
```

Time limit exceeded in my code

---> best code:

```
class Solution {
 public int maxProfit(int[] prices) {
     int buy = prices[0];
     int profit = 0;
     for (int i = 1; i < prices.length; i++) {</pre>
          if (prices[i] < buy) {</pre>
              buy = prices[i];
         } else if (prices[i] - buy > profit) {
              profit = prices[i] - buy;
     return profit;
}
```

Only if sell is less than buy, buy value is changing, If not only profit is changing

https://leetcode.com/problems/best-time-to-buy-and-sell-stock/solutions/4868897/most-optimized-kadane-s-algorithm-java-c-python-rust-javascript/