$a = \{7, 1, 5, 3, 6, 4\}$

Buy on day i

sell on day $j > i$

Get max profit

$$= a[j] - a[i]$$

```
for(i = 0; i < N-1; i++){
    for(j = i+1; j < N; j++){
        compare
        A[j] - A[i]
    }
}
```
$\longrightarrow \theta(n^2)$

4
6
3
5
1
7

$a[i] - a[j] >$

$a[i] - a[k]$

$if \; a[j] < a[k]$

tempmax $\leftarrow 0$

currmin $\leftarrow A[0]$

for($i = 1; i < N; i++$) {

A[i] < currmin : currmin $\leftarrow A[i]$

else : tempMax, A[i] - currmin

}

compare

$\{7, 1, 5, 3, 6, 4\}$

7	0
1	0
1	4
1	4
1	6
1	⑥

$\{7, 6, 4, 3, 1\}$

7	0
6	0
4	0
3	8
1	⑥