

121. Best Time to Buy and Sell Stock

题目描述: <https://leetcode.com/problems/best-time-to-buy-and-sell-stock/>

给定一个数组，里面存储着每个时刻的股票价值，求什么时候买入什么时候卖出的差价最高，输出最大的差价。

例如：

```
[6,1,3,2,4,7]
```

输出：

```
6
```

解题思路：

DP

```
f[i] = max(f[i-1]+a[i]-a[j], 0)
```

代码：

```
class Solution {
public:
    int maxProfit(vector<int>& a) {
        vector<int> f(a.size()+1, 0);
```

```
..... - (.....) / - / - / ,  
for(int i = 1; i < a.size(); i++){  
    f[i] = f[i-1] + a[i] - a[i-1];  
    if(f[i] < 0)  
        f[i] = 0;  
}  
int max = 0;  
for(int i = 1; i < f.size(); i++){  
    if(f[i] > max)  
        max = f[i];  
}  
return max;
```

```
}
```

```
};
```