动态规划： 123. 买卖股票的最佳时机 III

```cpp
class Solution {
public:
    int maxProfit(vector<int>& prices) {
        int n = prices.size();

        vector<vector<int>> f(n,vector<int>(3,-0x3f3f3f3f));
        auto g = f;
        f[0][0] = -prices[0];
        g[0][0] = 0;
        for(int i = 1 ;i < n;i++)
        {
            for(int j = 0;j < 3 ;j++)
            {
                f[i][j] = max(f[i-1][j],g[i-1][j] - prices[i]);
                g[i][j] = g[i-1][j];
                if(j >= 1)
                g[i][j] = max(g[i][j],f[i-1][j-1] + prices[i]);
            }
        }
        return max(max(g[n-1][2],g[n-1][1]),g[n-1][0]);

    }
};
```