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Sec: 601/A

## 1<sup>st</sup>: 1710 leetcode

```
class Solution {
public:
    int maximumUnits(vector<vector<int>>& boxTypes, int truckSize) {
        sort(boxTypes.begin(), boxTypes.end(), [](vector<int>& a, vector<int>& b) {
            return a[1] > b[1];
        });

        int ans = 0;
        for (auto& box : boxTypes) {
            int x = min(box[0], truckSize);
            ans += (x * box[1]);
            truckSize -= x;
            if (truckSize == 0) break;
        }
        return ans;
    }
};
```

Input

boxTypes =

[ [1,3], [2,2], [3,1] ]

truckSize =


4

Output

8

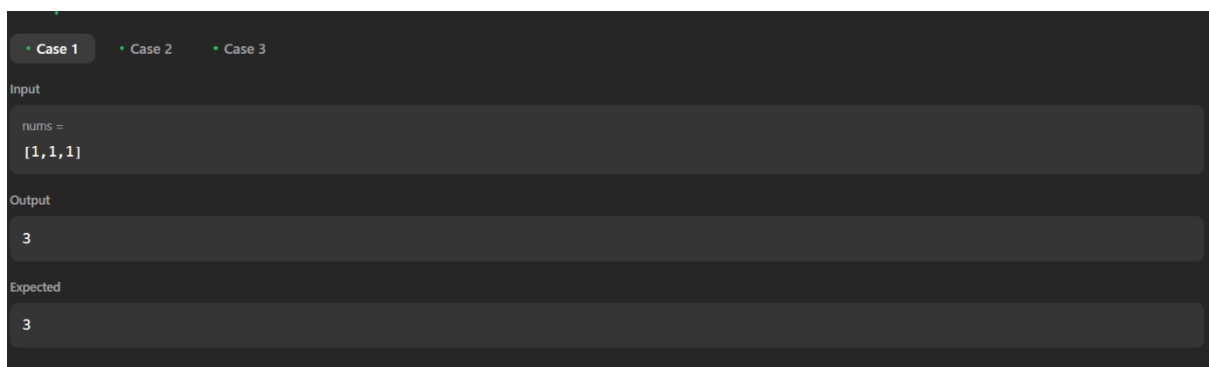
Expected

8

 Contribute to leetcode

## 2<sup>ND</sup>:1827 leetcode

```
class Solution {  
public:  
    int minOperations(vector<int>& nums) {  
        int steps = 0;  
  
        for (int i = 0; i < nums.size() - 1; ++i) {  
            if (nums[i] > nums[i + 1]) {  
                steps += ((nums[i] - nums[i + 1]) + 1);  
                nums[i + 1] += ((nums[i] - nums[i + 1]) + 1);  
            } else if (nums[i] == nums[i + 1]) {  
                steps += 1;  
                nums[i + 1] += 1;  
            }  
        }  
  
        return steps;  
    }  
};
```



## 3<sup>RD</sup> :1962 leetcode

```
class Solution {  
public:  
    int minStoneSum(vector<int>& piles, int k) {
```

```

priority_queue<int>pq(piles.begin(),piles.end());

int ans=0;

for(int i=0;i<k;i++){

    int tp=pq.top();

    pq.pop();

    tp-=(tp/2);

    pq.push(tp);

}

while(!pq.empty()){

    ans+=pq.top();

    pq.pop();

}

return ans;

}

};

```

Input	
piles =	[5,4,9]
k =	2
Output	12
Expected	12

## 4<sup>TH</sup> : 1717 leetcode

```

class Solution {
public:
    int maximumGain(string s, int x, int y) {
        vector<char> st1;
        stack<char> st2;
        char first = (x>y) ? 'a' : 'b';
        char second = (x>y) ? 'b' : 'a';
        int maxV= max(x, y);

```

```

int minV = min(x, y);
int ans=0;
for(char c: s){
    if(!st1.empty() && st1.back()==first && c== second){
        ans= ans+ maxV;
        st1.pop_back();
    }
    else{
        st1.push_back(c);
    }

}

for(char c: st1){
    if(!st2.empty() && st2.top()==second && c== first){
        ans= ans+ minV;
        st2.pop();
    }
    else{
        st2.push(c);
    }

}

return ans;

}

};

```

S =  
"cdcbbaaabab"

x =  
4

y =  
5

Output

19

Expected

19