

```

#include <bits/stdc++.h>

using namespace std;

vector<int> zeros,negat,s;
int n,k,a,v,ans1,ans2,aux1,aux2,b;
char op;

void update(int pos,int value){
    for(;pos<=n;pos+=(pos&-pos)){
        if(value<0)negat[pos]++;
        if(value == 0) zeros[pos]++;
    }
}

void rem(int k){
    int val = s[k];
    for(;k<=n;k+=(k&-k)){
        if(val<0)negat[k]--;
        if(val==0)zeros[k]--;
    }
}

void query(int k,int &a,int &b){
    a=0;
    b=0;
    for(;k>0;k--=(k&-k)){
        a+=negat[k];
        b+=zeros[k];
    }
}

int main(){
    while(cin >> n >> k){
        zeros.assign(n+1,0);
        negat = zeros;
        s = zeros;

        for(int i=1;i<=n;i++){
            cin >> v;
            update(i,v);
            s[i] = v;
        }

        while(k--){
            cin >> op >> a >> b;
            if(op == 'C'){
                rem(a);
                update(a,b);
                s[a]=b;
            }
            else{
                query(b,ans1,ans2);
                query(a-1,aux1,aux2);
                //cerr << ans1 << "." << aux1 << " " << ans2 << "."
                << aux2 << endl;

                ans1-=aux1;ans2-=aux2;
                if(ans2>0)cout << "0";
                else if(ans1&1)cout << "-";
                else cout << "+";
            }
        }
        cout << endl;
    }
    return 0;
}

```