[**树状数组**](http://www.cppblog.com/notonlysuccess/archive/2009/03/19/77215.html)

<http://acm.hdu.edu.cn/showproblem.php?pid=1166>

#include<stdio.h>  
#define MAX 50001  
#define lowbit(x) (x&(-x))  
int sum[MAX],tree[MAX];  
int query(int x)  
{  
    int sum = 0;  
    while(x>0)  
    {  
        sum += tree[x];  
        x -= lowbit(x);  
    }  
    return sum;  
}  
void add(int a,int b,int n)  
{  
    while(a<=n)  
    {  
        tree[a] += b;  
        a += lowbit(a);  
    }  
}  
int main()  
{  
    int T,n,i,cas,data;  
    scanf("%d",&T);  
    for(cas=1;cas<=T;cas++)  
    {  
        scanf("%d",&n);  
        tree[0] = sum[0] = 0;  
        for(i=1;i<=n;i++)  
        {  
            scanf("%d",&data);  
            sum[i] = sum[i-1] + data;  
            tree[i] = sum[i] - sum[i - lowbit(i)];  
        }  
        char com[10];  
        int a,b;  
        printf("Case %d:\n",cas);  
        while(scanf("%s",com),com[0]-'E')  
        {  
            scanf("%d%d",&a,&b);  
            if(com[0]=='Q')  
                printf("%d\n",query(b) - query(a-1));  
            else if(com[0]=='A')  
                add(a,b,n);  
            else  
                add(a,-b,n);  
        }  
    }  
    return 0;  
}

二维的话就这样抄作  
  
int query(int x,int y)  
{  
    int sum=0;  
    while(x>0)  
    {  
        int tmp = y;  
        while(tmp>0)  
        {  
            sum += tree[x][tmp];  
            tmp -= lowbit(tmp);  
        }  
        x -= lowbit(x);  
    }  
    return sum;  
}  
void add(int x,int y,int num)  
{  
    while(x<=MAX)  
    {  
        int tmp = y;  
        while(tmp<=MAX)  
        {  
            tree[x][tmp] += num;  
            tmp += lowbit(tmp);  
        }  
        x += lowbit(x);  
    }  
}

两道赤裸裸的二维树形数组  
<http://acm.hdu.edu.cn/showproblem.php?pid=1892>  
<http://acm.hdu.edu.cn/showproblem.php?pid=2642>   
  
稍微变化一点  
<http://acm.hdu.edu.cn/showproblem.php?pid=1541>   
<http://acm.hdu.edu.cn/showproblem.php?pid=2227>  
<http://acm.hdu.edu.cn/showproblem.php?pid=2688>