

```
1  #include<stdio.h>
2  #include<string.h>
3
4  #define MAX 212345
5
6  int n, ft[MAX];
7
8  int rsq(int i) {
9      int ret;
10     for (ret = 0 ; i > 0; i -= (i & -i)) ret += ft[i];
11     return ret;
12 }
13
14 void update(int i, int v) {
15     for ( ; i <= n; i += (i & -i)) {
16         ft[i] += v;
17     }}
18
19 int main(void) {
20     int caso, i, resist[MAX], x, y, r, flag, first = 1;
21     char c, cl;
22     for (caso = 1; scanf("%d", &n), n; caso++) {
23         memset(ft, 0, sizeof(ft));
24         for (i = 1; i <= n; i++) {
25             scanf("%d", &resist[i]);
26             update(i, resist[i]);
27         }
28         if (first) first = 0;
29         else printf("\n");
30         printf("Case %d:\n", caso);
31         for (flag = 1; flag; ) {
32             scanf(" %c", &c);
33             if (c == 'E') {
34                 scanf("%c%c", &c, &cl);
35                 flag = 0;
36             } else if (c == 'S') {
37                 scanf("%d %d", &x, &r);
38                 update(x, r - resist[x]);
39                 resist[x] = r;
40             } else {
41                 scanf("%d %d", &x, &y);
42                 printf("%d\n", rsq(y) - rsq(x - 1));
43             }
44         }
45     }
46     return 0;
47 }
```