```c
1   #include <stdio.h>
2   #include <string.h>
3
4   #define MAX 2623456
5   #define MAXC 2000001
6
7   int campo[2][MAX], A[MAX], B[MAX], n;
8
9   void ft_set(int time, int pos, int val){
10    int i;
11    for(i = pos; i <= MAXC; i += i & -i)
12      campo[time][i] += val;
13  }
14
15  int ft_get(int time, int pos){
16    int ret = 0, i;
17    for(i = pos; i; i -= i & -i)
18      ret += campo[time][i];
19    return ret;
20  }
21
22  int impedido(int time, int num){
23    if(!time){
24      return (ft_get(!time, MAXC) - ft_get(!time, A[num]) < (n) / 11.0);
25    }
26    return (ft_get(!time, B[num]-1) < (n) / 11.0);
27  }
28
29  int main(void){
30    int e, i, imp, num, npos, gol[2];
31    char c, time;
32    while(scanf("%d %d", &n, &e), n){
33      imp = 0;
34      memset(campo, 0, sizeof(campo));
35      memset(gol, 0, sizeof(gol));
36      for(i = 1; i <= n / 2; i++){ scanf("%d", &A[i]); A[i]++; ft_set(0, A[i], 1); }
37      for(i = 1; i <= n / 2; i++){ scanf("%d", &B[i]); B[i]++; ft_set(1, B[i], 1); }
38      for(i = 0; i < e; i++){
39        scanf(" %c", &c);
40        switch(c){
41        case 'I':
42      scanf(" %c%d", &time, &num);
43      imp |= impedido(time - 'A', num);
44      break;
45        case 'M':
46      scanf(" %c%d %d", &time, &num, &npos);
47      time -= 'A';
48      ft_set(time, (time == 0) ? A[num] : B[num], -1);
49      ft_set(time, npos + 1, 1);
50      if(!time) A[num] = npos + 1;
51      else B[num] = npos + 1;
52      break;
53        case 'P':
54      scanf(" %c%d", &time, &num);
55      imp |= impedido(time - 'A', num);
56      break;
57        case 'G':
58      scanf(" %c", &time);
59          time -= 'A';
60      if(!imp) gol[!time]++;
61      imp = 0;
62      break;
63        case 'S':
64      imp = 0;
65      break;
66        }
67        //printf("[%d] ", imp);
68      }
69      printf("%d X %d\n", gol[0], gol[1]);
70    }
71    return 0;
72  }
```