```cpp
//[猜數字遊戲的提示/Master-Mind Hints](1/2)
#define IN "P05IN.txt"
#define OUT "P05OUT.txt"
//**************************************
#include <iostream>
#include <ctime>
using namespace std;
void redir(void);
//**************************************
/* Work Space*/

//**************************************
int main(void)
{
    redir(); //redirection
//**************************************
/* Work Space*/
    int n;
    int kase = 0;
    int i;
    int a[1000], b[1000]; //陣列大小依題意
    int A, B;
    int d, c1, c2;

    while(scanf("%d", &n) == 1 && n){
        printf("Game %d\n", ++kase);
        for(i=0; i<n; i++){
            scanf("%d", &a[i]);
        }

        while(1){
            A = B = 0;

            for(i=0; i<n; i++){
                scanf("%d", &b[i]);
                if(a[i] == b[i]) A++; //直接統計可得A
            }

            if(b[0] == 0) break; //正常的猜測序列不會有0

            for(d=1; d<=9; d++){ //只會出現數字1到9
                c1 = c2 =0;
                for(i=0; i<n; i++){ //對每個數字d, 統計在二者出現在a和b的次數: c1和c2
                    if(a[i] == d) c1++;
                    if(b[i] == d) c2++;
                }
                B += min(c1, c2); //min(c1, c2)就是該數字對B的貢獻
            }

            printf("    (%d,%d)\n", A, B-A); //最後要減去A的部分
        }
    }
//**************************************
    freopen("CON", "r", stdin); //取消重新導向
    freopen("CON", "w", stdout);

    printf("Time used = %.2f\n", (double)clock()/CLK_TCK); //傳回程式目前為止執行的時間

    system("pause");
    return 0; //the end...
}
```

```
//[猜數字遊戲的提示/Master-Mind Hints](2/2)
void redir(void)
{
    freopen(IN, "r", stdin);
    freopen(OUT, "w", stdout);
}
//*************************************
/* Work Space*/

//Input(IN) Sample
/*
4
1 3 5 5
1 1 2 3
4 3 3 5
6 5 5 1
6 1 3 5
1 3 5 5
0 0 0 0
10
1 2 2 2 4 5 6 6 6 9
1 2 3 4 5 6 7 8 9 1
1 1 2 2 3 3 4 4 5 5
1 2 1 3 1 5 1 6 1 9
1 2 2 5 5 5 6 6 6 7
0 0 0 0 0 0 0 0 0 0
0
*/

//Output(OUT)
/*
Game 1
    (1,1)
    (2,0)
    (1,2)
    (1,2)
    (4,0)
Game 2
    (2,4)
    (3,2)
    (5,0)
    (7,0)
*/
```