

```

1 // [救濟金發放/The Dole Queue](1/2)
2 #define IN "P10IN.txt"
3 #define OUT "P10OUT.txt"
4 //*****
5 #include <iostream>
6 #include <ctime>
7 using namespace std;
8 void redir(void);
9 //*****
10 /* Work Space*/
11 int a[20]; //依題意(致多19人)
12 int n;
13
14 int go(int p, int d, int t);
15 //*****
16 int main(void)
17 {
18     redir(); //redirection
19 //*****
20 /* Work Space*/
21     int i;
22     int left;
23     int pA, //for A
24         pB; //for B
25     int k, m;
26
27     while(scanf("%d%d%d", &n, &k, &m) == 3 && n){
28         for(i=1; i<=n; i++){
29             a[i] = i;
30         }
31         left = n;
32
33         pA = n; //預備位置(回撥1步)
34         pB = 1;
35
36         while(left){
37             pA = go(pA, 1, k); //1 for 順時針
38             pB = go(pB, -1, m); //-1 for 逆時針
39
40             printf("%3d", pA);
41             left--;
42             if(pB != pA){
43                 printf("%3d", pB);
44                 left--;
45             }
46
47             a[pA] = a[pB] = 0; //pA, pB 離開隊伍
48
49             if(left) printf(",");
50         }
51         printf("\n");
52     }
53 //*****
54     freopen("CON", "r", stdin); //取消重新導向
55     freopen("CON", "w", stdout);
56
57     printf("Time used = %.2f\n", (double)clock()/CLK_TCK); //傳回程式目前為止執行的時間
58
59     system("pause");
60     return 0; //the end...
61 }
62
63

```

```

64 //[救濟金發放/The Dole Queue](2/2)
65 void redir(void)
66 {
67     freopen(IN, "r", stdin);
68     freopen(OUT, "w", stdout);
69 }
70 //*****
71 /* Work Space*/
72 //順(逆)時針前進t個人
73 int go(int p, int d, int t)
74 {
75     while(t--){
76         do{
77             p = p+d;
78             if(p == (n+1)) p=1;
79             if(p == 0) p=n;
80         }while(a[p] == 0); //0 表早已離開隊伍
81     }
82     return p;
83 }
84
85 //Input(IN) Sample
86 /*
87 10 4 3
88 0 0 0
89 */
90
91 //Output(OUT)
92 /*
93 4 8, 9 5, 3 1, 2 6, 10, 7
94 */

```