

```

1 // [團體佇列/Queue]
2 #define IN "P0509IN.txt"
3 #define OUT "P0509OUT.txt"
4 //*****
5 #include <iostream>
6 #include <time.h>
7 using namespace std;
8 void redir(void);
9 //*****
10 /* Work Space*/
11 #include <map>
12 #include <queue>
13 #include <string>
14 //*****
15 int main(void)
16 {
17     redir(); //redirection
18 //*****
19 /* Work Space*/
20     int t, n, x;
21     int i;
22     int t0;
23     int kase = 0;
24
25     while(scanf("%d", &t) == 1 && t){ //t: the number of teams, 0 for quit
26         map<int, int> team; //block scope
27         for(i=0; i<t; i++){
28             scanf("%d", &n); //n: the number of elements of team i
29             while(n--){
30                 scanf("%d", &x); //x: element
31                 team[x] = i;
32             }
33         }
34
35         queue<int> teamQueue;
36         queue<int> elementQueue[1000]; //elementQueue[i]: queue of elements of team i
37
38         printf("Scenario #%d\n", ++kase);
39         while(1){
40             string cmd; //block scope
41             cin >> cmd;
42
43             if(cmd[0] == 'S'){//STOP
44                 break;
45             }else if(cmd[0] == 'D'){//DEQUEUE
46                 t0 = teamQueue.front();
47                 cout << elementQueue[t0].front() << endl;
48                 elementQueue[t0].pop();
49                 if(elementQueue[t0].empty()){
50                     teamQueue.pop();
51                 }
52             }else if(cmd[0] == 'E'){//ENQUEUE
53                 scanf("%d", &x);
54                 t0 = team[x];
55                 if(elementQueue[t0].empty()){
56                     teamQueue.push(t0);
57                 }
58                 elementQueue[t0].push(x);
59             }
60         }
61         printf("\n");
62     }
63 //*****

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64     freopen("CON", "r", stdin); //取消重新導向
65     freopen("CON", "w", stdout);
66
67     printf("Time used = %.2f\n", (double)clock()/CLK_TCK); //傳回程式目前為止執行的時間
68
69     system("pause");
70     return 0; //the end...
71 }
72
73 void redir(void)
74 {
75     freopen(IN, "r", stdin);
76     freopen(OUT, "w", stdout);
77 }
78 //*****
79 /* Work Space*/
80 //Input(IN) Sample
81 /*
82 2
83 3 101 102 103
84 3 201 202 203
85 ENQUEUE 101
86 ENQUEUE 201
87 ENQUEUE 102
88 ENQUEUE 202
89 ENQUEUE 103
90 ENQUEUE 203
91 DEQUEUE
92 DEQUEUE
93 DEQUEUE
94 DEQUEUE
95 DEQUEUE
96 DEQUEUE
97 STOP
98 2
99 5 259001 259002 259003 259004 259005
100 6 260001 260002 260003 260004 260005 260006
101 ENQUEUE 259001
102 ENQUEUE 260001
103 ENQUEUE 259002
104 ENQUEUE 259003
105 ENQUEUE 259004
106 ENQUEUE 259005
107 DEQUEUE
108 DEQUEUE
109 ENQUEUE 260002
110 ENQUEUE 260003
111 DEQUEUE
112 DEQUEUE
113 DEQUEUE
114 DEQUEUE
115 STOP
116 0
117 */

```