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1  /// Final Lab 2557-1: Olympic Medal
2
3  #include <stdio.h>
4
5  struct country {
6      int code, gold, silver, bronze, total;
7  } typedef COUNTRY;
8
9  int main() {
10     COUNTRY A[250];
11     int max_gold = -1;
12     int max_silver = -1;
13     int max_bronze = -1;
14     int max_total = -1;
15
16     int N;
17     scanf("%d", &N);
18     for(int i = 0; i < N; ++i) {
19         scanf("%d %d %d %d", &A[i].code, &A[i].gold, &A[i].silver, &A[i].bronze);
20         A[i].total = A[i].gold + A[i].silver + A[i].bronze;
21         if(A[i].gold > max_gold)
22             max_gold = A[i].gold;
23         if(A[i].silver > max_silver)
24             max_silver = A[i].silver;
25         if(A[i].bronze > max_bronze)
26             max_bronze = A[i].bronze;
27         if(A[i].total > max_total)
28             max_total = A[i].total;
29     }
30
31     while(1) {
32         int C;
33         scanf("%d", &C);
34         if(C <= 0) {
35             printf("good bye");
36             break;
37         }
38         if(C == 1001) {
39             for(int i = 0; i < N; ++i) {
40                 if(A[i].gold == max_gold)
41                     printf("%d ", A[i].code);
42             }
43         } else if(C == 1002) {
44             for(int i = 0; i < N; ++i) {
45                 if(A[i].silver == max_silver)
46                     printf("%d ", A[i].code);
47             }
48         } else if(C == 1003) {
49             for(int i = 0; i < N; ++i) {
50                 if(A[i].bronze == max_bronze)
51                     printf("%d ", A[i].code);
52             }
53         } else if(C == 2000) {
54             for(int i = 0; i < N; ++i) {
55                 if(A[i].total == max_total)
56                     printf("%d ", A[i].code);
57             }
58         } else if(C == 3000) {
59             for(int i = 0; i < N; ++i) {
60                 if(A[i].total > 0)
61                     printf("%d ", A[i].code);
62             }
63         } else {
64             int match = 0;
65             for(int i = 0; i < N; ++i) {
66                 if(A[i].code == C) {

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67             printf("%d %d %d %d", A[i].gold, A[i].silver, A[i].bronze, A[i].
total);
68             match = 1;
69             break;
70         }
71     }
72     if(match == 0)
73         printf("invalid code");
74     }
75     printf("\n");
76 }
77
78 return 0;
79 }
```