

```

1  /// Final 2557-1: Array Sampling {Method 2: Struct}
2  /// Main idea: Since we need to know the length of each array so that
3  /// we can check whether a referred position is correct or not. To
4  /// organize the code in a way that a data array and its length are
5  /// together, we use a struct. Then, employ an array of this struct
6  /// to hold the entire data.
7  #include <stdio.h>
8  #include <limits.h>
9
10 struct array_pack {
11     int D[1000];
12     int length;
13 } typedef ArrayPack;
14
15 ArrayPack A[101];
16
17 int main() {
18     int N;
19     scanf( "%d", &N );
20     for( int i = 1; i <= N; ++i ) {
21         scanf( "%d", &A[i].length );
22         for( int j = 0; j < A[i].length; ++j ) {
23             scanf( "%d", &A[i].D[j] );
24         }
25     }
26
27     int sum = 0;
28     int invalid = 0;
29     int min = INT_MAX;
30     int max = INT_MIN;
31
32     while(1) {
33         int p, q;
34         scanf( "%d", &p );
35         if( p == 0 )
36             break;
37
38         scanf( "%d", &q );
39         if( p > N ) {
40             ++invalid;
41             continue;
42         }
43
44         if( q >= A[p].length ) {
45             ++invalid;
46         } else {
47             int val = A[p].D[q];
48             sum += val;
49             if( val > max )
50                 max = val;
51             if( val < min )
52                 min = val;
53         }
54     }
55     printf( "%d\n%d\n%d\n%d", sum, max, min, invalid );
56
57     return 0;
58 }
```