

C (CLang)/teme/tema8/main.c

```
1  #include <stdio.h>
2
3  int data[3];
4  int luna[13] = {0, 31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31};
5
6  void leap_year() {
7      if (data[2] % 4 == 0) {
8          if (data[2] % 100 == 0) {
9              if (data[2] % 400 == 0) {
10                 luna[2]++;
11             }
12         } else {
13             luna[2]++;
14         }
15     }
16 }
17
18 int validare_data(int data[3]) {
19     if (data[2] >= 0) {
20         if (data[1] >= 1 && data[1] <= 12) {
21             if (data[0] >= 1 && data[0] <= luna[data[1]]) {
22                 return 1;
23             }
24         }
25     }
26     return 0;
27 }
28
29 void data_urmatoare(int data[3]) {
30     data[0]++;
31     if (data[0] > luna[data[1]]) {
32         data[0] -= luna[data[1]];
33         data[1]++;
34         if (data[1] > 12) {
35             data[1] = 1;
36             data[2]++;
37         }
38     }
39 }
40
41 int nr_de_zile() {
42     int zile = 0;
43     int data1[3], data2[3];
44
45     for (int i = 0; i < 3; i++) {
46         scanf("%d", &data1[i]);
47     }
48     for (int i = 0; i < 3; i++) {
49         scanf("%d", &data2[i]);
50     }
51     if (validare_data(data1) && validare_data(data2)) {
```

```
52         while (data1[0] != data2[0] || data1[1] != data2[1] ||
53                data1[2] != data2[2]) {
54             data_urmatoare(data1);
55             zile++;
56         }
57     }
58     return zile;
59 }
60
61 int main() {
62     for (int i = 0; i < 3; i++) {
63         scanf("%d", &data[i]);
64     }
65     leap_year();
66     printf("%d\n", validare_data(data));
67     if (validare_data(data)) {
68         data_urmatoare(data);
69         for (int i = 0; i < 3; i++) {
70             printf("%d ", data[i]);
71         }
72     }
73     printf("%d", nr_de_zile());
74
75     return 0;
76 }
```