## lab03

```
$ gcc lab03.c
$ ./a.out
Input a date (m/d): 1/1
It is day 1 of the year,
in the week 1 of the year,
and it is Wednesday.
$ ./a.out
Input a date (m/d): 12/31
It is day 366 of the year,
in the week 53 of the year,
and it is Thursday.
$ ./a.out
Input a date (m/d): 3/1
It is day 61 of the year,
in the week 10 of the year,
and it is Sunday.
$ ./a.out
Input a date (m/d): 9/14
It is day 258 of the year,
in the week 38 of the year,
and it is Monday.
$ ./a.out
Input a date (m/d): 1/4
It is day 4 of the year,
in the week 1 of the year,
and it is Saturday.
CPU time: 0.0046943 sec
score: 70
o. [Output] Program output is correct, good.
o. [Format] Program format can be improved
```

## lab03.c

```
1 // EE2310 lab02 Day of the Year
   // EE2310 lab03 Day of the Year
 2 // 109061217, 林峻霆
 3 // Date: 2020/10/5
   Need a blank line here.
 4 #include<stdio.h>
   #include <stdio.h>
 5 #include<stdlib.h>
   #include <stdlib.h>
   Why do we need stdlib?
 6
7 int main(void)
8 {
9
       int month;
                                                             // input month
       int day;
                                                            // input day
10
       int total_day;
                                                            // total day
11
       int week;
                                                             // week
12
13
       int weekday;
                                                             // on which weekday
14
       printf("Input a date (m/d): ");
                                                             // prompt for input
15
       scanf("%d/%d", &month, &day);
                                                            // input month, day
16
17
       switch (month) {
18
                                                             // judge and calculate
19
       case 1:
           case 1:
          total day = day;
20
              total_day = day;
21
          break;
              break;
22
       case 2:
           case 2:
          total_day = day + 31;
23
              total day = day + 31;
24
          break;
              break;
           case 3:
25
           total_day = day + 60;
26
               total day = day + 60;
27
           break;
               break;
```

```
28
       case 4:
           case 4:
           total_day = day + 91;
29
               total_day = day + 91;
30
           break;
               break;
       case 5:
31
           case 5:
           total_day = day + 121;
32
               total day = day + 121;
33
           break;
               break;
34
       case 6:
           case 6:
           total_day = day + 152;
35
               total_day = day + 152;
36
           break;
               break;
       case 7:
37
           case 7:
           total day = day + 182;
38
               total_day = day + 182;
39
           break;
               break;
40
       case 8:
           case 8:
           total_day = day + 213;
41
               total_day = day + 213;
42
           break;
               break;
43
       case 9:
           case 9:
           total_day = day + 244;
44
               total_day = day + 244;
45
           break;
               break;
46
       case 10:
           case 10:
           total_day = day + 274;
47
               total_day = day + 274;
48
           break;
```

```
break;
49
       case 11:
           case 11:
           total_day = day + 305;
50
               total day = day + 305;
51
           break;
               break;
       case 12:
52
           case 12:
           total_day = day + 335;
53
               total_day = day + 335;
54
           break:
               break;
       This break is not needed.
       }
55
56
       week = (total day + 9) / 7;
57
                                                            // calculate the week
       week = (total_day + 9) / 7;
                                                          // calculate the week
       weekday = ( total_day + 3 ) % 7;
                                                            // calculate the weekday
58
       weekday = (total_day + 3) % 7;
                                                          // calculate the weekday
59
60
       printf("It is day %d of the year, \n", total day);
                                                            // print total day
       printf("in the week %d of the year, \n", week);
                                                            // print week
61
62
63
       switch (weekday) {
                                                            // judge and print
64
       case 0:
           case 0:
          printf("and it is Saturday.");
65
              printf("and it is Saturday.");
66
          break;
              break;
67
       case 1:
           case 1:
68
          printf("and it is Sunday.");
              printf("and it is Sunday.");
69
          break;
              break;
70
       case 2:
           case 2:
71
          printf("and it is Monday.");
              printf("and it is Monday.");
```

```
72
          break;
              break;
73
       case 3:
           case 3:
74
          printf("and it is Tuesday.");
              printf("and it is Tuesday.");
75
          break;
              break;
76
       case 4:
           case 4:
          printf("and it is Wednesday.");
77
              printf("and it is Wednesday.");
78
          break;
              break;
79
       case 5:
           case 5:
          printf("and it is Thursday.");
80
              printf("and it is Thursday.");
81
          break;
              break;
       case 6:
82
           case 6:
          printf("and it is Friday.");
83
              printf("and it is Friday.");
84
          break;
              break;
       This break is not needed.
85
       printf("\n");
                                                             // new line
86
87
       return 0;
                                                             // end the program
88
89 }
```