

```
1 //
2 // Created by hfwei on 2023/10/6.
3 //
4
5 #include <stdio.h>
6
7 int main(void) {
8     int year = 0;
9     scanf("%d", &year);
10
11     int leap = 0;
12
13     // TODO (hfwei): repeated branch body in conditional chain
14     if (year % 4 != 0) {
15         leap = 0;
16     } else if (year % 100 != 0) {
17         leap = 1; // year % 4 == 0 and year % 100 != 0
18     } else if (year % 400 != 0) {
19         leap = 0;
20     } else {
21         leap = 1; // (year % 4 == 0 and year % 100 == 0 and) year % 400
           == 0
22     }
23
24     if (leap == 0) {
25         printf("%d is a common year\n", year);
26     } else {
27         printf("%d is a leap year\n", year);
28     }
29
30     return 0;
31 }
```