

```
1 //
2 // Created by hfwei on 2023/10/6.
3 //
4
5 #include <stdio.h>
6 int main(void) {
7     int year = 0;
8     scanf("%d", &year);
9
10    int leap = 0;
11
12    // TODO: C operator precedence
13    // URL: https://en.cppreference.com/w/c/language/operator\_precedence
14
15    // TODO (hfwei): order of evaluation
16
17    // TODO: short-circuit evaluation
18    // test: year = 25
19    // test: year = 80
20    // test: year = 100
21    // test: year = 400
22    // TODO: ! (year % 100 == 0)
23    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {
24        leap = 1;
25    } else {
26        leap = 0;
27    }
28
29    // int leap = (year % 4 == 0 && year % 100 != 0) || (year % 400 == 0
30    );
31
32    // TODO: leap = 0
33    if (leap == 0) {
34        printf("%d is a common year\n", year);
35    } else {
36        printf("%d is a leap year\n", year);
37    }
38    return 0;
39 }
```