

```
1 //
2 // Created by hfwei on 2023/10/6.
3 //
4
5 #include <stdio.h>
6 #include <stdbool.h>
7
8 bool IsLeapYear(int year);
9
10 int main(void) {
11     // year: in the main function: local variable
12     // life time:
13     // scope: from this point on until the main function exits
14     int year = 0;
15     scanf("%d", &year);
16
17     if (IsLeapYear(year)) {
18         printf("%d is a leap year\n", year);
19     } else {
20         printf("%d is a common year\n", year);
21     }
22
23     return 0;
24 }
25
26 // year: parameter
27 // life time
28 // scope as a local variable
29 bool IsLeapYear(int year) {
30     return (year % 4 == 0 && year % 100 != 0) || (year % 400 == 0);
31 }
```