

```
1 //
2 // Visualization (for n = 4): https://pythontutor.com/render.html#code=%23include%20%3Cstdio.h%3E%0A%0Along%20long%20Fib%28int%20n%29%3B%0A%0Aint%20main%28%29%20%7B%0A%20%20int%20n%20%3D%204%3B%0A%0A%20%20printf%28%22%25lld%5Cn%22,%20Fib%28n%29%29%3B%0A%7D%0A%0Along%20long%20Fib%28int%20n%29%20%7B%0A%20%20if%20%28n%20%3D%3D%200%29%20%7B%0A%20%20%20return%200%3B%0A%20%20%7D%0A%0A%20%20if%20%28n%20%3D%3D%201%29%20%7B%0A%20%20%20return%201%3B%0A%20%20%7D%0A%0A%20%20return%20Fib%28n%20-%201%29%20%2B%20Fib%28n%20-%202%29%3B%0A%7D&cumulative=false&curInstr=55&heapPrimitives=nevernest&mode=display&origin=opt-frontend.js&py=c\_gcc9.3.0&rawInputLstJSON=%5B%5D&textReferences=false
3 // Created by hfwei on 2023/11/9.
4 //
5
6 #include <stdio.h>
7
8 long long Fib(int n);
9
10 int main() {
11     int n;
12     scanf("%d", &n);
13
14     printf("%lld\n", Fib(n));
15
16     return 0;
17 }
18
19 long long Fib(int n) {
20     if (n <= 1) {
21         return n;
22     }
23
24     return Fib(n - 1) + Fib(n - 2);
25 }
```