

Ubuntu Pastebin

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```
1 #include <map>
2 #include <iostream>
3 using namespace std;
4 #define long long long
5 const long M = 1000000007; // modulo
6 map<long, long> F;
7 long f(long n) {
8     if (F.count(n)) return F[n];
9     long k=n/2;
10    if (n%2==0) { // n=2*k
11        return F[n] = (f(k)*f(k) + f(k-1)*f(k-1)) % M;
12    } else { // n=2*k+1
13        return F[n] = (f(k)*f(k+1) + f(k-1)*f(k)) % M;
14    }
15 }
16 main(){
17     long n;
18     F[0]=F[1]=1;
19     while (cin >> n)
20     {
21         n--;
22         cout << (n==0 ? 0 : f(n-1)) << endl;
23     }
24 }
```

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