Fibonacci

● Graded

Student
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Total Points
80 / 80 pts

Autograder Score
80.0 / 80.0

Passed Tests
Test 1 (20/20)
Test 2 (20/20)

Autograder Results

Test 1 (20/20)

Test 2 (20/20)

Submitted Files

fib.c Download

```c
#include <stdio.h>
#include <stdlib.h>
unsigned long long calc_fib(int n, unsigned long long mem[]) {
    if (n == 0 || n == 1) return n;
    if (mem[n] != (unsigned long long)-1) return mem[n];
    mem[n] = calc_fib(n - 1, mem) + calc_fib(n - 2, mem);
    return mem[n];
}
int main() {
    int n; scanf("%d", &n);
    unsigned long long *m = (unsigned long long *)malloc((n + 1) * sizeof(unsigned long long));
    for (int i = 0; i <= n; i++) m[i] = (unsigned long long)-1;
    unsigned long long ans = calc_fib(n, m), sum = 0;
    for (int i = 0; i <= n; i++) sum += m[i];
    printf("%llu", ans);
    free(m); return 0;
}

```