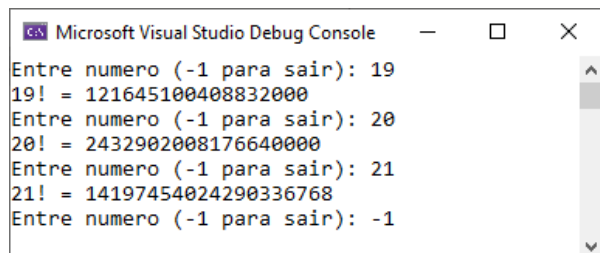


Solução fatorial de números altos

```
#include <stdio.h>

unsigned long long fat(int n)
{
    unsigned long long f = 1ull;
    while (n > 1)
        f *= n--;
    return f;
}

int main(void)
{
    int n;
    do
    {
        printf("Entre numero (-1 para sair): ");
        scanf("%d", &n);
        if (n >= 0)
            printf("%d! = %llu\n", n, fat(n));
    } while (n >= 0);
    return 0;
}
```



```
Microsoft Visual Studio Debug Console
Entre numero (-1 para sair): 19
19! = 121645100408832000
Entre numero (-1 para sair): 20
20! = 2432902008176640000
Entre numero (-1 para sair): 21
21! = 14197454024290336768
Entre numero (-1 para sair): -1
```

1! = 1
2! = 2
3! = 6
4! = 24
5! = 120
6! = 720
7! = 5040
8! = 40320
9! = 362880
10! = 3628800
11! = 39916800
12! = 479001600
13! = 6227020800
14! = 87178291200
15! = 1307674368000
16! = 20922789888000
17! = 355687428096000
18! = 6402373705728000
19! = 121645100408832000
20! = 2432902008176640000
21! = 51090942171709440000
22! = 112400072777607680000
23! = 25852016738884976640000
24! = 620448401733239439360000
25! = 15511210043330985984000000
26! = 403291461126605635584000000
27! = 10888869450418352160768000000