

fact.c

```
1  #include <stdio.h>
2
3  int main() {
4      int n, i = 1;
5      int factorial = 1;
6      printf("Enter a non-negative integer: ");
7      scanf("%d", &n);
8
9      // Check if the number is negative
10     if (n < 0) {
11         printf("Error: Factorial is not defined for negative numbers.\n");
12     } else {
13         // Calculate the factorial using a while loop
14         while (i <= n) {
15             factorial = factorial * i; // Multiply current factorial by i
16             i++; // Increment the counter
17         }
18         printf("Factorial of %d is %d \n", n, factorial);
19     }
20
21     return 0;
22 }
23
```