```cpp
#include<iostream>

using namespace std;

long factorial(int n);

int main()
{
    int n(0);
    cin>>n;
    long val=factorial(n);
    cout<<val;
    cin.get();
    return 0;
}

long factorial(int n)
{
    long result(1);
    while(n>0) //doesn't let n reach 0
{
  result*=n;
   n--;       //decrements only after the evaluation
}
    return result;
}
```



```
[1]+  Stopped                    ./corrected_code
[[hpakala@hopper3 week3]$ ./corrected_code
 5
[120[hpakala@hopper3 week3]$ ./corrected_code
 7
[5040[hpakala@hopper3 week3]$ ./corrected_code
 9
[hpakala@hopper3 week3]$ nano corrected code cp
```