

## Fact.cpp

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1 /*****
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4 * ASSIGNMENT #4 : Assessing Recursion Performance
5 * CLASS        : CS 1B
6 * SECTION      : MW - 7:30 pm - 9:50 pm
7 * DUE DATE     : 11/26/2019
8 *****/
9
10 #include "MyHeader.h"
11
12 /*****
13 * factNum
14 *   This function will calculate the factNumorial of user's number.
15 *
16 *   returns integer -> factNumorial of the target number
17 *****/
18
19 int Fact(int userInp)    //IN & PROCESS - user's input
20 {
21
22     /*****
23     *   VARIABLE *
24     *****/
25
26     long long factNum;    //PROCESS & OUT - factNumorial of user input number
27
28     /*****
29     *   INITIALIZE *
30     *****/
31
32     factNum = userInp;
33
34     //if statement for user input
35     if(userInp == 0 || userInp == 1)
36     {
37         factNum = 1;
38         return factNum;
39     }
40
41     else
42     {
43         factNum = factNum * Fact(userInp - 1);
44         return factNum;
45     }
46 }
47
```