Assignment Requirements for gamma function program

Personal Software Process for Engineers

# Program Requirements

Compute the factorial for an integer.

Your program must read an integer from the keyboard, a file, etc.

The factorial is represented as *n*! and is computed as a recursive product such that *n*! = *n*\*(*n* − 1)!, terminating with the special case 0! = 1.

Write the factorials for numbers 1 through 15 to a file.

|  |  |
| --- | --- |
|  | ***N*** |
| 0 | 1 |
| 1 | 1 |
| 2 | 2 |
| 6 | 3 |
| 24 | 4 |
| 120 | 5 |
| 720 | 6 |
| 5040 | 7 |
| 40320 | 8 |
| 362880 | 9 |
| 3628800 | 10 |
| 39916800 | 11 |
| 479001600 | 12 |
| 6227020800 | 13 |
| 87178291200 | 14 |

# Gamma Function for Integers and Half Integers

The gamma function is a recursive function defined as , where

* 
* 

Document Markings

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