

Answer to Question #76171, Programming & Computer Science / Algorithms

Write a pseudocode version of the factorial function

(a) iteratively

Answer:

```
Input: n           // first n positive integers
If  $n \leq 2$  then
    Fact=n;
Else {
    Fact=2
    For i=3 to n
        Fact=Fact·i
    }
Return Fact        // n!
```

(b) recursively

Answer:

```
Function Fact(n) {
    If  $n \leq 2$  then
        Return n;
    Else
        Return n·Fact(n-1) }
```