Exercises — Factorial

The way is lit. The path is clear.
We require only the strength to follow it.

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Contents

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File Tree

```
fact/
└── fact.c   (to submit)
```

Authorized headers : You are only allowed to use the functions defined in the following headers

- err.h

- errno.h

- assert.h

- stddef.h

Compilation : Your code must compile with the following flags

- -std=c99 -pedantic -Werror -Wall -Wextra -Wvla

Main function : None

1 Goal

Implement the function `fact` with the following prototype:

```c
unsigned long fact(unsigned n);
```

It computes the factorial of `n` ($n!$) and returns the result. As a recall:

$$\forall n \in \mathbb{N}, n! = \begin{cases} 1 & \text{if } n = 0 \\ n \times (n-1)! & \text{if } n \neq 0 \end{cases}$$

You **must** use recursion (i.e.: loops are forbidden).

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