BACK

Least Factorial

DESCRIPTION SOLUTIONS 11001 COMMENTS 6 CODEWRITING SCORE: 300/300

Given an integer `n`, find the *minimal* `k` such that

- `k = m!` (where `m! = 1 * 2 * ... * m`) for some integer `m`;
- `k >= n`.

In other words, find the smallest factorial which is not less than `n`.

Example

For `n = 17`, the output should be
`leastFactorial(n) = 24`.

`17 < 24 = 4! = 1 * 2 * 3 * 4`, while `3! = 1 * 2 * 3 = 6 < 17`).

Input/Output

- **[execution time limit] 4 seconds (js)**
- **[input] integer n**

  A positive integer.

  Guaranteed constraints:
  `1 ≤ n ≤ 120`.

- **[output] integer**

[JavaScript (ES6)] Syntax Tips

```
// Prints help message to the console
// Returns a string
function helloWorld(name) {
    console.log("This prints to the console when you Run Tests");
    return "Hello, " + name;
}
```