Challenge: Using a Curried Function

Test yourself and implement what you have learned so far in this challenge.

We'll cover the following

Problem Statement

You are given a curried function `product` that which calculates the product of the values of a function for the points on a given interval.

Your challenge is to create a non-recursive factorial function `fact` which uses the `product` function to compute the factorial of a number.

Input

The input will be an integer `n`.

Output

The output will be the factorial of `n`.

Sample Input

```
fact(5)
```

Sample Output

```
120
```

Test Yourself

Test Yourself

Write your code in the given area. Try the exercise by yourself first, but if you get stuck, the solution has been provided. Good luck!

This code requires the following environment variables to execute:

LANG	C.UTF-8

```
def product(f: Int => Int)(a: Int, b: Int): Int ={
  if(a > b) 1
  else f(a) * product(f)(a+1,b)
}

def fact(n: Int) = {
  // Write your code here

  -1 // Remove this line after writing your code
}
```

Let’s go over the solution review in the next lesson.