Cp3_assignment_1_instructions

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Factorial, Fibonacci, and Foobar examples

Exercise 1

Re-create the factorial function, `factorial()` without calling the factorial function. Think about what inputs are appropriate for your function, and have your function return an `"Error"` string if provided an invalid input. Call your function `myFactorial`.

```
# Examples #

> myFactorial(5)
[1] 120

> myFactorial(-2)
[1] "Error"
```

Exercise 2

Write a function that returns a vector of the first n elements of the Fibonacci sequence, starting with 0,1,... Call your function `myFib`

```
# Examples #

> myFib(12)
[1]  0  1  1  2  3  5  8 13 21 34 55 89

> myFib(-2)
NULL
```

Exercise 3

Write a function called `fooBarFun` that takes a number for an input, if the number is divisible by 3 the function should return the string "Foo", if the number is divisible by 5 the function should return the string "Bar". Finally if the number is divisible by both 3 and 5 the function should return the string "FooBar". Return an empty string if the number is not divisible by 3 or 5. Use `%%` to check for divisibility and `paste0` to construct your string returns.

```
# Examples #

> fooBarFun(3)
[1] "Foo"

> fooBarFun(5)
[1] "Bar"

> fooBarFun(15)
[1] "FooBar"
```