

# Exercise: The Factorial of a Number

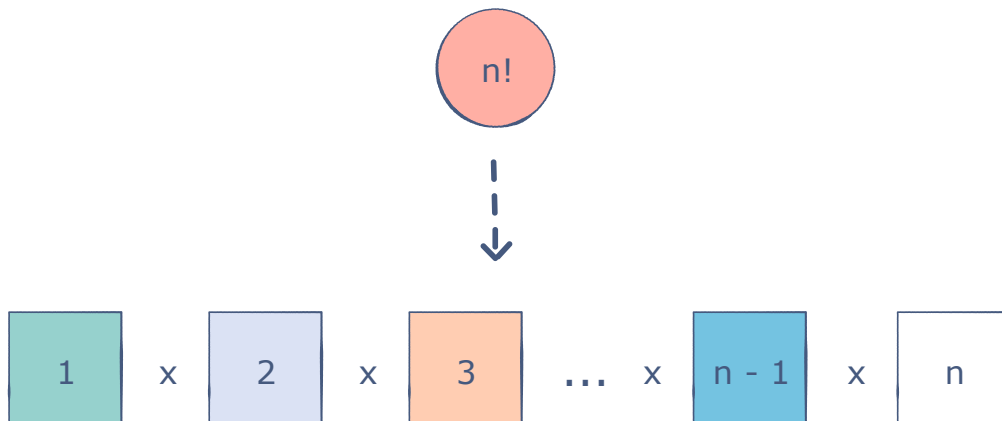
Let's calculate the factorial of an integer.

## WE'LL COVER THE FOLLOWING ^

- Problem Statement
- Sample Input
- Sample Output
- Coding Challenge

## Problem Statement #

For an integer,  $n$ , the factorial is its product with all the positive integers before it. The factorial is denoted by the  $!$  character.



In this exercise, you need to write the `fact()` method which takes in an integer and returns its factorial.

**Note:** For  $0$  or  $1$ , the factorial is always  $1$ .

For simplicity, we do not need to cater for negative integers.

## Sample Input #

```
fact(5)
```

## Sample Output #

```
120
```

## Coding Challenge #

Think carefully about the logic behind the algorithm before jumping on to the implementation. This problem shouldn't be too hard if you understand the basics of recursion.

If you feel stuck, you can always refer to the solution review in the next lesson.

Good luck!

```
let fact = (n: int) => {  
  /* Write your code here */  
  
  0; /* Erase this line when your implementation is complete */  
};
```

