

# Challenge 1: Find The Factorial

This lesson will test your knowledge of loops.

## We'll cover the following ^

- Problem Statement
  - Input
  - Output
  - Sample Input
  - Sample Output
- Coding Exercise

## Problem Statement #

The task is to print the factorial of a number `n`.

The factorial of a number  $n$  is the product of all numbers from 1 to  $n$ .

$$factorial(n) = n * (n - 1) * (n - 2) * ... * 1$$

```
factorial (3)= 3 * 2 * 1
factorial(3) = 6
```

**Note:** Assume that the negative numbers may be passed in as argument and that the factorial of a negative number should be set as zero.

## Input #

Integer

## Output #

## Sample Input #

3

## Sample Output #

6

## Coding Exercise #

Write your code below. It is recommended that you try solving the exercise yourself before viewing the solution.

**Note:** There is a `test` function given in the code for testing purposes. Do not modify it.

Good luck! 🍀

```
fn test(n:i32) {  
    // Write code here!  
}
```



Hint 1 of 1

```
< for condition {  
    statement;  
}>
```

Let's move on to the detailed solution of the above problem in the next lesson.

