

# Challenge\_1

2025-04-04

## The Challenge

In this challenge, you are required to estimate Euler's number  $e$  using its series expansion.

## Challenge Description

Construct an R function that can compute the value of  $e$  to at least five decimal places. The function should rely on the series expansion method.

## Method

You will need to implement the series expansion  $e = \sum_{n=0}^{\infty} \frac{1}{n!}$  in R, making use of loops to sum the terms of the series until additional terms do not change the result significantly.