

Lab: Processes

This lab is about multi-processing in Python.

Write a program that can find the factorial of any given number. For example, find the factorial of the number 5 (often written as 5!) which is $1 * 2 * 3 * 4 * 5$ and equals 120.

In our program the factorial is not defined for negative numbers and the factorial of Zero is 1; that is $0! = 1$. Also the factorial of 1 is 1.

Next modify the program to run multiple factorial calculations in parallel. The program could take an iterable (such as a list) of values to create the factorial for.

Collect all the results together in a list and print that list out.

You can use whichever approach you like to running multiple processes although a Pool could be a good approach to use.

Your program should compute the factorials of 5, 8, 10, 15, 3, 6, and 4 in parallel.

The output might look like:

```
[120, 40320, 3628800, 1307674368000, 6, 720, 24]
```