

Introductory Python Exercises

If you have not done so already, start by installing Python 3.6 and an appropriate editor on your computer (see the Resources page on the LMS for links to more information on this step). Alternatively, to get straight into coding, fire up an online Python development environment such as repl.it (but note that you'll eventually need to install Python to complete the project).

After you can write and execute a simple “hello world” program, use Python to find the solution to the following Project Euler problems. Project Euler (projecteuler.net) is an online collection of challenging mathematics and programming problems. The following problems have been selected as appropriate challenges to help you refresh and/or develop your Python programming skills in preparation for COMP30024. Depending on your Python background, solving these problems may require significant research into Python's syntax and features.

- [Problem 2](#) - Even Fibonacci numbers
- [Problem 4](#) - Largest palindrome product
- [Problem 9](#) - Special Pythagorean triplet
- [Problem 11](#) - Largest product in a grid
- [Problem 14](#) - Longest Collatz sequence

If you would like to validate your answers, you may register for a free account at projecteuler.net/register and then log in. Now each problem page will allow you to submit an answer for validation. In keeping with the spirit of Project Euler, please do not publish your solutions online.