

Exercises: Values, Types, Expressions and Statements

For all the exercises you should write a test program as well as the program itself. NB The test program may well be bigger and more complex than the program itself!

Part A

Write a Python program to output the table of values of simple compound interest for an investment amount given on the command line for interest rates of 3%, 5%, and 7% for a period of 10 years.

Part B

Write a Python module that provides a function that counts all the characters, words and lines in a file. (cf. `wc` on Linux/Solaris/Mac OS X/Unix.) The function should be able to take a string (the name of a file to be opened) or a file-like object (of an already opened file) as a parameter.

Part C

Write a Python program that prints the size of the files named on the command line. Ensure that having as a parameter the name of a file that does not exist does not cause a problem.

Part D

Write a Python program that calculates the mean of data found in a file whose name is given on the command line.