

Specification for Assignment 02

Your submission for this assignment **must include your full name** and your nine-digit **student number as a comment** at the top of the **source file you submit**. All source code files must be written using the **Python 3 programming language** and must run on the course's **official virtual machine**.

Do not compress your submission into a "zip" file.

Submissions that crash (i.e., terminate with an error) on execution will receive a mark of 0.

Officially, the Due Date for this Assignment is: Friday, October 1st, 2021, at 11:59pm EST.

Late Submissions are Accepted Without Penalty Until Sunday, October 3rd, by 11:59pm EST. Submissions received after that will not be accepted and will receive a mark of 0.

For this assignment you will demonstrate that you can use type conversion functions and arithmetic operations as part of a program that observes the "pipeline" design pattern. You will do so by creating a program that takes input from the user (using both a command-line argument and a call to the input function) and then performs a complex series of operations that was assigned specifically to your student number.

In order to complete this task, you will need to:

- find your assigned instructions on Brightspace¹
- know how to use a command-line argument²
- read about the conversion functions and arithmetic operators³
- evaluate your instructions (by hand) for several inputs (to design test cases for yourself)

Your submission for this assignment:

- must be a source code file with filename⁴ 'comp1405 f21 ####### assignment 02.py'
- must NOT import anything other that 'sys' (which is required for command-line arguments)
- must use both a command-line argument and a single call to the 'input' function
- must store the result in a variable, updating and printing that variable after each operation
- must print the final result to the screen using "triangle brackets" (e.g., <65>)
- can assume that the user will always enter a positive integer at any opportunity for input

¹ The "Tasks for Assignment 2.pdf" document on Brightspace contains each student's assigned instructions.

² You may wish to refer to "live_demo_05_echo_utility.py", as that demo exhibited the use of a command-line argument

³ In addition to being discussed in class, these subjects were also covered in Chapter 2.6 and 2.7 of our official textbook.

⁴ You must replace the number signs in the filename with your official nine-digit student identification number.