1811ICT/2807ICT/7001ICT Programming Principles Workshop 1

School of Information and Communication Technology

Griffith University

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| *Goals* | In this workshop we setup the Python environment. |
| *When* | Week 2 |

# Preparation

Before your workshop class:

* Read this whole document.
* Review the lecture notes sections 1 to 4.

# Workshop activities

At any stage, when you are stuck, *ask your workshop instructor*!

## Install Python

The primary resource for Python programmers is the Python website: <https://www.python.org/>.

From here you can [download software](https://www.python.org/downloads/) and access the [documentation](https://docs.python.org/3/library/), particularly that of the standard library.

Download the Python software installer from <https://www.python.org/> and run it.

It installs slightly differently on different operating systems.

**MacOS:**

MacOS already has Python 2 installed by default.

The interpreter command for Python 2 is python.

The interpreter command for Python 3 therefore has to be different and is python3.

**Windows:**

Python is not preinstalled on Windows, so the Python 3 interpreter is just called python.

The Windows install wizard for Python 3 has two pages of options.

Most of them should be left with their default values.

On the second page check “Add Python to environment variables”.

This ensures that you can type python on the command line.

If you forget to do this, run the installer again to modify the settings.

## Running Python REPL

After installing Python, run the Python REPL.

**MacOS:**

$python3

>>> 52

52

>>> type(52)

<class ‘int’>

>>> type(5.2)

<class ‘float’>

**Windows:**

$python

>>> 52

52

>>> type(52)

<class ‘int’>

>>> type(5.2)

<class ‘float’>



**How do you exit the REPL?**

## Running a Python Script

How would you change the above code to run Python with a script?

Try these steps:

1. Create a file and call it *myScript.py*
2. Add some command(s) to the script and save the file
3. Add the command line, run the Python interpreter:

MacOS:

$python3 myScript.py

Windows:

$python myScript.py



**How would this be done differently in an IDE?**