## School of Computing and Information Systems COMP90038 Algorithms and Complexity

## **Installing Python, IDLE and Jupyter Notebook**

At the time of writing the latest Python release is 3.8.1. You will find the download page at:

https://www.python.org/downloads/release/python-381/,

if this page is is not available, you can go try the alternative location:

https://www.python.org/downloads/

and click through the prompts to choose your operating system and/or Python release.

- On Windows: choose the 'Windows x86-64 executable installer' which currently links to https://www.python.org/ftp/python/3.8.1/python-3.8.1-amd64.exe. Execute this program and follow the prompts to install Python.
- On Mac OSX: choose the 'macOS 64-bit installer' which currently links to https://www.python.org/ftp/python/3.8.1/python-3.8.1-macosx10.9.pkg.
  Open this package and follow the prompts to install Python.
- On Linux: use your OS's package manager to install Python and IDLE. For example, on Ubuntu execute the following command in a Terminal:

```
sudo apt-get install python3 idle3
```

You will probably see a message such as python3 is already the newest version. However, IDLE is not installed by default and will be installed by this command.

• On the Engineering Faculty lab PCs: version 3.6.4 is already installed. However, note that it is far more convenient to use a personal PC, as you will be able to work independently.

After installing Python, you may install the Jupyter Notebook by executing the following command:

pip install notebook

## Creating a working folder

You will need to create a folder to store your Python programs in. You may create this in your home directory, which is located in one of the following places:

- On Windows: normally C:\Users\username where username refers to your login username
- On Mac OSX: normally /Users/username where username refers to your login username.
- On Linux: normally /home/username where username refers to your login username.
- On the Engineering Faculty lab PCs: at H:\ which should be automatically mounted for all users. In practice, some students do not have a home directory, and in this case a ticket should be opened with Central IT Support. The ticket will be assigned to Engineering IT Support who will create the home directory in due course.

Browse to here using your OS's file manager (start by opening 'Computer' on Windows) and create a folder called COMP90038 or similar (right-click and choose 'New' then 'Folder' on Windows).

## Launching the environment

To launch the IDLE environment:

- On Windows: open the Start Menu and type in IDLE.
- On Mac OSX or Linux: start a Terminal window and then type:

idle

• On the Engineering Faculty lab PCs: open the *Start Menu* and choose the folder 'Python 3.6' and then 'IDLE (Python 3.6 64-bit)'.

In the IDLE window you should see a welcome message something like

```
Python 3.8.1 (tags/v3.8.1:1b293b6, Dec 18 2019, 23:11:46) [MSC v.1916 64 bit (AMD64)] on Type "help", "copyright", "credits" or "license" for more information.
```

The >>> prompt allows you to start typing Python code which will be evaluated immediately.

To launch the Jupyter Notebook environment:

• On Windows (or Engineering Faculty lab PCs): open command prompt, run the following command:

```
jupyter notebook
```

• On Mac OSX or Linux: start a Terminal window and then type:

```
jupyter notebook
```