

Introduction to exercises

The practical exercises are designed to supplement the technical training material in this course. Some of the questions introduce further details of functions discussed during the course.

Each practical describes overall objectives and any special requirements for the questions. Most of the questions will require you to look up information in the online manual pages for their completion.

Optional exercises may be included at the end of a section marked "**If time allows**". These questions are usually more complex. You are not normally expected to attempt these questions, unless you have completed the first set of questions before the end of the time allotted for the exercises.

Many of the exercises will require you to write complete programs, although these will be quite short. In some cases, additional material such as pre-written functions will be provided. The instructions for the exercises will indicate when this has been done.

If the course is carried out on QA premises, you have the option to use Microsoft Windows or a Linux VM. The username and password for the Linux VM is **qa**. An OS X version is in development.

Online directory structure

On Windows: all of the files mentioned here are stored in a directory called **labs**. This is normally on your C: drive, but may reside elsewhere, particularly for courses not carried out on QA premises. Your instructor should clarify the exact location.

On Linux: all the files should be in your home directory. If using the supplied Linux VM, this will be **/home/qa**.

On OSX: as Linux, the files should be in your home directory. Python 3 should be called as `python3`, and the `#!` line is **`#!/usr/bin/python3`**. Idle is started by calling `idle3` from the command-line, but you might have an app launcher installed. Your instructor should be able to clarify.



Solutions

Sample solutions to all the questions are provided online, in a subdirectory called **solutions**, and in printed form after the questions for each chapter. Please remember that, as in many programming tasks, there are several ways to approach and solve most problems. Just because yours is different to ours does not mean that your answer is wrong!

You may of course just examine and run the solution provided without writing any code. You will not get as much out of the course if you do that, however. Make sure you understand the solution if you do not attempt to answer a question.