Text

Description automatically generated

2.7-2.10: Online Session 2

This document has been updated to reflect the materials which were covered and shared within the session.  Anything new is highlighted in purple.

Prefer to complete this activity offline? - download the following documents:

* Full PowerPoint slides: [Hybrid Session 2 Full Slides.pptx](https://winchester.instructure.com/files/1666569/download?wrap=1)
* The input() command walkthrough: [2.8 Input Command Walkthrough.docx](https://winchester.instructure.com/files/1666572/download?wrap=1)

In this topic, we will be focussing on the following learning outcome for this week:

* Implement programs which make use of lists within Python
* Demonstrate ability to obtain data from users using the console

You will have the following learning opportunities:

* To understand, create, and use lists within Python
* To utilise basic string operations within Python
* To use the input() function within Python to obtain input from the user
* To convert strings obtained by the user into appropriate data types

A picture containing icon

Description automatically generatedIcon

Description automatically generatedLogo

Description automatically generatedA picture containing drawing

Description automatically generatedIcon

Description automatically generated

During this online session, you will be engaging in acquisition, discussion, investigation, practice and production learning activities.

# Welcome to Session

For this session we will be focussing on the following topics:

* List Operations;
* The input() Command;
* The None Keyword; and
* Overview and Next Week

# 2.7: List Operations

There are a number of different possible operations which can be used on lists.  In this section, we will investigate the different operations which are possible and examine their outputs.

This was a continuation of the list operations in the previous hybrid session.  Additionally, we looked at how we can utilise list operations with regards to strings - there were some operations which would also work on strings which can sometimes be seen as a "list of characters".

# 2.8: The input() Command

There is only so much we can do with a program without getting information from the user.  In this section, we will be discussing how we can get inputs from the user using the console and the input() command.

In this section, we started talking about how we can use the input() command to obtain information from the user through string entry in the console window.  We also discussed and investigated how we can convert the string (which is produced by the input() command) into numbers to allow us to  carry out other operations on the user input.

# 2.9: The None Keyword

The None keyword allows us to define variables which at the point of creation, has no value associated with it.  In this section, we will discuss the purpose of the None keyword and give an example of how it may be used together with what the None keyword may mean in terms of data.

In the final part of this session, we defined and discussed the None keyword.  We talked about how we can utilise it, but also what None means in real terms.

# 2.10: Summary and Next Steps

In this final part of this hybrid session, we will be reiterating the topics we have covered during the pre-session materials, and the hybrid sessions.  We will talk about what you need to do next in terms of finishing the content for this week - which includes the practice questions and stretch tasks.  Finally, we will talk about the topics we will be covering next week in the pre-session content and timetabled sessions.