We studied how widely used mathematical operators, like multiplication, addition and combinations of these are represented in Python.

\*

We used Boolean operators to compare variables, returning true or false values.

\*

And we used logical operators **and, or** and **not** to compare the outcome of Boolean operations, also returning Boolean True or False values

\*

We used combinations of these operators to produce compound statements in code.

For example, we can set some variables to compare, that represent times.

We can then express the statement “Lunchtime is after lunch begins and before lunch ends” in different ways, using different combinations of operators.

We can write “Lunchtime is after works begins and before work ends, and not at lunchtime” in more than one way too.

\*

Pause the video now and try this exercise.

A video showing a worked solution, and the code, can be found on blackboard.

\*

Lastly, let’s review the different data structures we studied and their uses: lists, tuples, sets and dictionaries.

Lists are ordered collections of mutable object, meaning the individual elements of the data structure can be modified.

Tuples are immutable and so they are used when we don’t want the individual elements to change.

Sets are unordered collections of objects and are used to test for existence and membership rather than when we are concerned with using and manipulating the data in the elements themselves.

Dictionaries are a look-up table style data structures, in which information, which can itself be a data structure, can be accessed using a unique key.