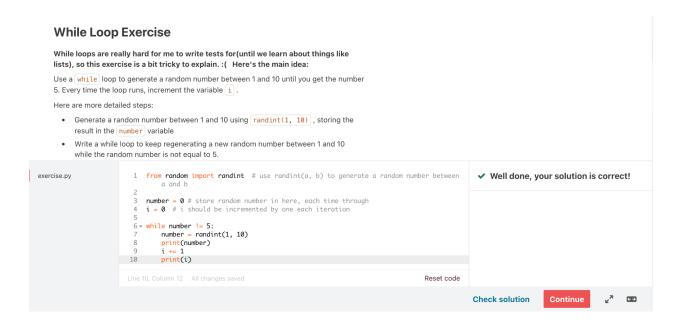
Looping in Python (cont'd)

While loop:

We can also iterate using while loops. They continue to execute while a certain condition remains truthy and will end when they become falsey.

Controlled Exit:

The keyword **break** is used to give us the ability to exit out of while loops whenever we want.



Lists

What is a list? It is a collection or grouping of items. It's a way of combining data into one variable or one structure.

Objectives:

- Describe, create, and access a list data structure
- Use built-in methods to modify and copy lists
- Iterate over lists using loops and list comprehensions
- Work with nested lists to build more complex data structures

How are lists useful? A fundamental data structure for organizing a collection of items. **How many elements exist?** Let's use the first built-in function for lists—*len*, aka length.



Accessing values in a list:

Like ranges, lists ALWAYS start counting at 0. Therefore, the first element will have an index of 0.

To check if a value is in a list, we use the keyword in.

