Python Lists and Tuples

Lists in Python
- A list is a collection that is ordered and changeable.
- Lists are written with square brackets [ ].
- Lists allow duplicate elements.

Example:
```
my_list = [1, 2, 3, "apple", "banana"]
print(my_list[0]) # Output: 1
my_list[1] = "orange" # Changing element
print(my_list) # [1, 'orange', 3, 'apple', 'banana']
```

Common List Methods:
- append(x): Add an element at the end
- insert(i, x): Insert element at index i
- remove(x): Remove first occurrence of element
- pop(i): Remove element at index i (default last)
- sort(): Sort the list
- reverse(): Reverse the list
- len(): Returns number of items

Tuples in Python
- A tuple is a collection that is ordered and unchangeable (immutable).
- Tuples are written with round brackets ( ).
- Tuples allow duplicate elements.

Example:
```
my_tuple = (1, 2, 3, "apple", "banana")
print(my_tuple[0]) # Output: 1
# my_tuple[1] = "orange" -> ERROR (Tuples cannot be modified)
```

Common Tuple Operations:
- count(x): Returns count of x in tuple
- index(x): Returns first index of x
- len(): Returns number of items