Data Structures

Lists

```
In [2]: my_list = [1,2,3,4]
        print(my_list)
```

```
[1, 2, 3, 4]
```

```
In [3]: my_list = ['list', 'of', 'strings']
```

```
In [4]: my_list = [1,'list', False, []]
```

```
In [5]: my_list = [[1,2,3],[False, True], []]
```

```
In [6]: len(my_list)
```

Out[6]: 3

Sets

```
In [8]: my_set = {1,2,3,4,5}
        print(my_set)
```

```
{1, 2, 3, 4, 5}
```

```
In [9]: type(my_set)
```

Out[9]: set

```
In [10]: len(my_set)
```

Out[10]: 5

```
In [12]: my_set = {1,1,2,2}
         len(my_set)
         print(my_set)
```

```
{1, 2}
```

```
In [14]: [1,2] == [2,1]
```

Out[14]: False

In [17]: `{1,2,3} == {3,2,1,1,1}`

Out[17]: True

Tuples

In [19]: `my_tuple = (1,2,3)`

In [20]: `len(my_tuple)`

Out[20]: 3

In [21]: `(1,2) == (2,1)`

Out[21]: False

In [24]:
```python
my_list.append(6)
print(my_list)
```

```
[[1, 2, 3], [False, True], [], 4, 4, 6]
```

In [25]: `my_tuple.append(4)`

```
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
Input In [25], in <module>
----> 1 my_tuple.append(4)

AttributeError: 'tuple' object has no attribute 'append'
```

Dictionaries

In [26]:
```python
my_dictionary = {
    'apple': 'A red fruit',
    'bear': 'A scary animal'
}
```

In [27]: `my_dictionary['apple']`

Out[27]: 'A red fruit'

In [28]:
```python
my_dictionary = {
    'apple': 'A red fruit',
    'bear': 'A scary animal',
    'apple': 'Sometimes a green fruit'
}
```

In [29]: `my_dictionary['apple']`

Out[29]: `'Sometimes a green fruit'`

In [ ]: