

Name: Will Ross #3734692

Class: Cs2613

Assessment: Lab 6

Data: Jan 30th, 2024

List (Python)

In python lists are dynamic meaning that they do not need to be declared and the length is not needed and can be added as we go. With python in its built-in library, you can use four different datatypes. List in python use [] which is important because there are three types of arrays in python: List, tuples, dictionaries.

```
mylist = ["apple", "banana", "cherry"]
```

Array (Java)

Arrays in java need a data type as well as the length of the array and when they are set the length of the array cannot be changed, unlike python where the length can always be changed. Syntax is curly braces for inputting inputs

```
String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};
```

Same

Java arrays and Python list are the same with indexing. Both start at index 0 and go to index(n), the structure with working with both is the same within for loops and accessing with index i. Python has a little bit more functionally compared to java arrays, but not ArrayList in Java but that's not build in.