

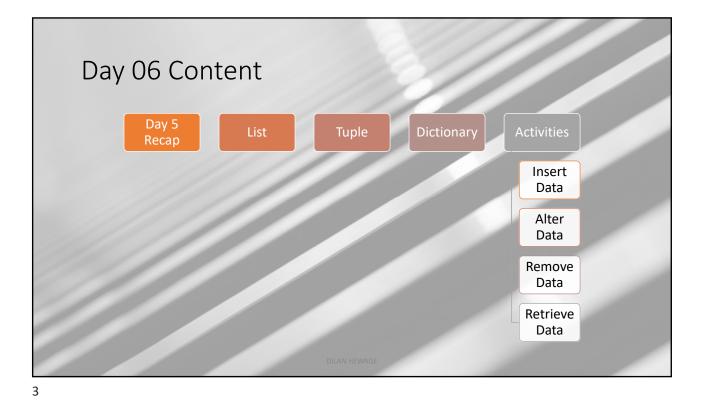
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Algorithm Development & Python Programming

Workshop Day - 6

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Day 5 Recap 5 දින සාරාංශය



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Python List

- Lists are used to store multiple items in a single variable.
- Lists are one of 4 built-in data types in Python used to store collections of data, the other 3 are Tuple, Set, and Dictionary, all with different qualities and usage.
- Lists are created using square brackets
- List items are ordered, changeable, and allow duplicate values.
- List items are indexed, the first item has index [0], the second item has index [1] etc.
- · Changeable
- · Allow Duplicates

thislist = ["apple", "banana", "cherry"]
print(thislist)

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Python Tuples

- Tuples are used to store multiple items in a single variable.
- Tuple is one of 4 built-in data types in Python used to store collections of data, the other 3 are List, Set, and Dictionary, all with different qualities and usage.
- A tuple is a collection which is ordered and unchangeable, allow duplicates.
- Tuples are written with round brackets.

```
thistuple = ("apple", "banana", "cherry")
print(thistuple)
```

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Python Sets

- Sets are used to store multiple items in a single variable.
- Set is one of 4 built-in data types in Python used to store collections of data, the other 3 are List, Tuple, and Dictionary, all with different qualities and usage.
- A set is a collection which is both unordered and unindexed.
- · Sets are written with curly brackets.
- Sets are unordered, so you cannot be sure in which order the items will appear.
- Unchangeable

```
thisset = {"apple", "banana", "cherry"}
print(thisset)
```

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Python Dictionaries

- Dictionaries are used to store data values in key:value pairs.
- A dictionary is a collection which is ordered*, changeable and does not allow duplicates.
- As of Python version 3.7, dictionaries are ordered. In Python 3.6 and earlier, dictionaries are unordered.
- Dictionaries are written with curly brackets, and have keys and values
- Dictionaries are changeable, meaning that we can change, add or remove items after the dictionary has been created.
- Dictionaries cannot have two items with the same key

```
thisdict = {
   "brand": "Ford",
   "model": "Mustang",
   "year": 1964
}
print(thisdict["brand"])
```

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End of the Day 6

Have you learned something? See you all again on day 7