

Business Programming (using Python)

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Main topics

- In-class presentation
 - Data Structures: Dictionaries
 - Exercises

In-class presentation

- How do you input numbers into a Python list?
 - How do you finalize your entries to find the **maximum** and **minimum** values?
 - Example:
 - Entered numbers: 1039, 67, 852, 123, 56, 13, 7
 - **Maximum** : 1039
 - **Minimum** : 7
- **Brianna Abreu** will present her answer to this question today.

Data Structures - Dictionaries (III)

What is dictionary in Python?

- Python dictionary is an unordered collection of items. Each item of a dictionary has a **key/value** pair.
 - Dictionaries are optimized to retrieve **values** when the **key** is known.

A Key Value Pair

Key Value
"1": "FACE Prep"



A Dictionary

Dict1 = {"1": "FACE Prep", "2": "Python"}

Separator (comma)



In-class warm-up exercises: Dictionaries

- **Accessing elements** inside a Dictionary
 - **Changing elements** inside a Dictionary
 - Using loop to **print keys and values**
 - **Removing items** from a Dictionary
- Please click on the link provided below.
 - [In-class warm-up exercises](#)

Creating Python dictionary

- Creating a dictionary is as simple as placing items inside curly braces `{ }` separated by commas or the `dict()` built-in function.
 - An item has a `key` and a corresponding `value` that is expressed as a pair `{key: value}`.
 - The `key` and the `value` is separated by a colon `:`. Items are separated from each other by a comma `,`.

Python

```
>>> dict = { } #empty dictionary
>>> dict = {1:'Python',2:'Java',3:'C++'}
```

Exercises

- Please click on the link provided below.
 - [Built-In Data Structures: Dictionaries](#)
 - [In-Class Exercise](#)