

Programming

Lesson11 - Collections

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Collection

- ▶ Container of datatypes/values
 - ▶ Example: List → ["List", 14, 19.2, False]

Tuple

- ▶ Ordered and unchangeable collection
 - ▶ `my_tuple = (3, "hey", 5.667)`
- ▶ Functions:
 - ▶ Access:
 - ▶ `my_tuple[<index>] → my_tuple[1] → hey`
 - ▶ Loop:
 - ▶ `for item in my_tuple:
print(item)`
 - ▶ Existence:
 - ▶ `if 3 in my_tuple:
print("yessss")`

Dictionary

- ▶ Unordered, changeable and indexed collection
 - ▶ `my_dictionary = {<key2>: <value1>, <key2>: <value2>}`
 - ▶ `{"FirstName": "Saaed", "LastName": "Essa", "Grade": 100, "address": {"City": "..", "country": "..."} }`
- ▶ Functions:
 - ▶ Access:
 - ▶ `my_dictionary["FirtName"]` or `my_dictionary.get("FirstName")`
 - ▶ Loop:
 - ▶ `for key, value in my_dictionary.items():`
 - ▶ `print(key, value)`
 - ▶ Existence:
 - ▶ `if key in my_dictionary` / `if key in my_dictionary.keys():`
 - ▶ Change/Add:
 - ▶ `my_dictionary["LastName"] = "Isa"`

Set

- ▶ Unordered and unindexed collection
 - ▶ `my_set = {'programming', 1239, 'Set', 123.2231}`
- ▶ Functions:
 - ▶ Access
 - ▶ Not indexed → search for item
 - ▶ Add:
 - ▶ `my_set.add('new item')`
 - ▶ Remove:
 - ▶ `my_set.remove(1239)`

Let's try...😊

- ▶ Open PyCharm:
 - ▶ Create new file: collections.py
 - ▶ Start coding 😊

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Thank you 😊!

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Stay tuned for more!