# Programming

Lesson6 - List الدرس السادس - القائمة

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## Reminder - Lesson5

- Conditions
- Operators
  - ► And/Or
  - >>, <, >=, <=, ==</pre>

## List

- Collection of values
- Ordered
- Changeable
- Allows different types
- Allows duplicate members

### How to

- Start with [
- ends with ]
- Items separated by comma ,

#### Definition examples:

- **▶** [1, 2, 3, 4, 5, 100, 120]
- ['Programming', 'Python', 'Welcome']
- ► ['This is string', 10, 'another string', 12.2, True]
- **[**1.2, 5.77, 0.1, 459.21]
- ['String1', 'String2']

## **Usable functions**

my\_list = ['This is string', 10, 'another string', 12.2, True]

- Accessing item: by index number (starts from 0)
  - b my\_list[1] → 10
  - ▶ my\_list[4] → True
  - ▶ my\_list[10] → Error
- Change item value
  - my\_list[0] = 'Change' → ['Change', 10, 'another string', 12.2, True]
- List length
  - ► len(my\_list) → 5

## Usable functions cont.

my\_list = ['This is string', 10, 'another string', 12.2, True]

- Appending
  - ▶ my\_list.append('new') → ['Change', 10, 'another string', 12.2, True, 'new']
- Removing
  - ▶ my\_list.remove(10) → ['Change', 'another string', 12.2, True]
- Inserting (by index)
  - my\_list.insert(0, 'new') → ['new', 'Change', 10, 'another string', 12.2, True]

## Let's try...©

- Open PyCharm:
  - Create new file: lists.py
  - ► Start coding ©



# Thank you ©!

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Stay tuned for more!