

## SECTION 3: PYTHON OBJECT AND DATA STRUCTURE BASICS, 2 hrs 2 mins, 33 parts

### • 26/36 Tuples with Python

#### ○ Theory

- -> **tuples are immutable lists -> they're lists which can't be changed (mutated) and as a result have a lot less methods**
- -> **they are coordinates ()**
- -> **dictionaries {}**
- -> **lists / arrays []**

#### ○ JN

- -> he creates a tuple (1,2,3) and a list which is the same thing with [] brackets
- -> `type(t)` <- wither a tuple or a list
- -> example operations on the tuple
  - slicing -> `t[0]`
  - `len(t)`
  - you can store multiple values
  - `t[-1]` -> the penultimate element
  - **`name_of_tuple.count('a')` <- the number of times a is in the tuple**
  - **`name_of_tuple.index('a')` <- the index at which element a first appears**
- -> the immutability of tuples
  - he tries to change the value of one of the elements in the tuple and it returns an error
    - -> **data integrity (you can't accidentally reassign the values of elements in a tuple because they are immutable)**