

# CSCA08 FALL 2017

## WEEK 7 - SETS & DICTIONARIES

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# ADMIN

- No practical sessions this Friday
- A1

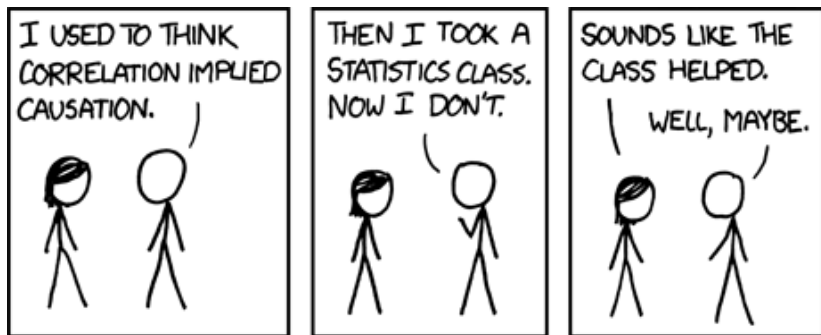
# NEW DATA TYPE: TUPLES

- Tuple
  - Like an immutable list
  - e.g., `my_tuple = (1, 2, 3)`
  - Useful when we want to group data together
  - Nice for assignment statements

## NEW DATA TYPE: SETS

- `my_set = {1, 2, 3}`
- Like a list: another mutable data type!
- Unordered
  - (Actually there is a way of knowing the order, we're just not telling you what it is...)
- An element is either in the set or it's not, no count
- Easy/efficient to check membership

## BREAK



# DICTIONARIES

- Lists/Tuples/Strings are ordered
- Dictionaries are **mapped**
  - Instead of accessing data in left-to-right order, we have  
keys
  - Actual data is (for our purposes) unordered
- e.g., `key1` maps to `data1`, `key2` maps to `data2`
  - `my_dictionary = {key1:data1, key2:data2,  
... , keyn:datan}`
- Think of them like sets, but instead of the keys just being in the set or not, they now map to a value