CS50 Week 7 Lab

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Python: Dictionaries vs Lists?

Dictionaries have key-value pairs: use for related values.

```python
# For example, say we have lists of the best houses on campus:
list1 = [1, 3, 2] # ranks
list2 = ['Cabot', 'Pfoho', 'Currier'] # names
# If I wanted to print out Pfoho's rank, how might I do that?
print(list1[list2.index('Pfoho')]) # not great
# Now I want to sort my first list in ascending order.
list1.sort() # [1, 2, 3]
# What about now? How could I print Pfoho's rank? What if they were linked together already?
dictionary_array = [{name: 'Cabot', rank: 1}, {name: 'Currier', rank: 2}, {name: 'Pfoho', rank: 3}]
# We can now change anything about our array without losing the connection between name and rank!
```

Creating SQL Statements

Action → Target → Modification

1. What do I want to do – access data, change data, remove data, etc?

2. What data do I need access to? Where is that data located?

3. Do I want only certain subsets of that data? How do I specify that?

A Non-Exhaustive Glossary of SQL Keywords

Actions	Targets & Linking Words	Modifiers
SELECT	FROM	ASC / DESC
ADD	WHERE	DISTINCT
CREATE	IN	UNIQUE
DELETE	AS	DEFAULT
DROP	BETWEEN	GROUP BY / ORDER BY
INSERT	HAVING	UPPER / LOWER
JOIN	AND	IS NULL / IS NOT NULL
ORDER BY	LIKE	SUM / AVG / COUNT
SET	OR	LIMIT
UPDATE	>, <, =, +, −, /, *	https://www.w3schools.com/sql/sql_ref_keywords.asp

Lab 7: Songs

tinyurl.com/gabecs50feedback