## Lecture 12 Notes - Wednesday 11/16/16

## Reading Quiz

Question 1: Ans = E
Question 2: Ans = A
Question 3: Ans = C
Question 4: Ans = A
Question 5: Ans = D

## Notes

JSON is a specification language for describing the structure of data. A JSON document is basically an unordered set of name-value pairs. The names are strings, but the values can be of several different types. These values can be nested; so a value can be of type Array, Object, ... Note that JSON is self-describing -- you don't define a schema before hand and make a bunch of records match that format. Instead, each "record" labels its values for you via the name-value pairs. So JSON lets you define the structure of your data on the fly.

Concept Question 1: C. For $A$, we'd be making basically a list of name-value pairs with a name corresponding to an object like the one shown here. This works, but the use of an array implies an order -- it's an ordered list. This doesn't make a whole lot of sense here, but it's not terrible. $B$ almost works but we need a name to correspond to each of these values, the nested objects. This is why $C$ is the right answer, because it adds these labels to match each person with their corresponding object.

Concept Question 2: B. We can see that favorite_count is not inside the value (which is null) corresponding to the contributors label, so $A$ does not work. The same reasoning leads us to see that $C$ and $D$ do not work either. Since favorite_count is at the "first level" inside of this object (as in, it is not contained inside a nested object), $B$ gives us the value we want. It goes to the name "favorite_count" and gives us the corresponding value.

Concept Question 3: C. In this code, we are using the API to search for tweets containing "\#childlabor" and storing these in cursor. We are then iterating over the pages of these results and storing each item, where each item is a tweet. In the function, we are storing each tweet in the same table (tweets), so C is the correct answer.

