**PHONE NUMBERS: hw0pr1**

For Problem 1 this week, your challenge is to read and analyze a large set of data files (almost 10,000). The files are available from this [link](https://github.com/ScriptingBeyondCS/CS-35/tree/master/week_0/hw0pr2): you'll want to download and unzip those. Your task is to compose several functions -- perhaps using and extending the functions from lab -- in order to answer several questions about the phone numbers and names in this set of files.

First, look through the folder, the subfolders, and a few of the files inside them to get a sense of their format. Each file has a phone number (in a variety of formats) on its first line and a name (in a couple of formats) in its second line. Your task is, first, to write functions that find the answer these questions:

Feel free to use helper functions.

1. How many .txt files are in the entire folder?
2. What is the maximum depth of directories in the entire folder (in other words, how many times can you dig deeper into a new subdirectory)?
3. What is the path to the deepest directory?
4. Across all of the files, how many of the phone numbers contain exactly 10 digits?
5. Of these exactly-ten-digit phone numbers, how many are in the area code 909 (the area code will be the first three digits of a ten-digit number).
6. How many people have the last name Davis?

Hint: Use the comma to determine whether the last name comes first or second. Caution: If you use str.endswith(), consider that each line ends with an ‘Enter’ (‘\n’)

1. How many people have the first name Davis?
2. How many people have the initials J.S.?
3. How many different first names are there?