hw1ec *Recipes!*

hw1ec problem: ***A recipe for disaster*** **hw1ec.ipynb**

For this problem, you'll be starting "from scratch" on a recipe-based challenge.

hw1ec this week is another file-analysis problem, this one focusing on ***organizing and comparing*** files -- our pie-recipe files!

Complete this problem by composing functions in a new notebook, hw1ec.ipynb (a starter is provided). As always, you're welcome to copy functions you wrote elsewhere to get started -- I might suggest

- copying useful work from hw1pr1 as a starting point
- The files to compare are a series of "experimental" pie recipes. They can be found in the recipes directory.

Your big-picture task is to **categorize the files** into three different types:

- savory recipes
- sweet recipes
- vegetarian recipes

Your code should search through the recipe files for keywords that will help you sort the files into categories according to the structure above. Look at a few of the recipes to get a sense of their structure and which words will be useful.

You are welcome - encouraged - to write functions to help. I'd encourage exploring small examples first.

Experiment! There are many approaches...

- Start simple, then build, testing along the way ...
- Decide which recipe is which and, in doing so, ...
- Create ***lists of all fullfilenames*** with savory, sweet, and vegetarian pies.

    - Hint: there are three ingredients that characterize non-vegetarian (savory) pies: beef, chicken, and/or pork.
    - It's up to you consider sweet pies vegetarian or not (it's ok to have them on two lists!
- Copy your lists into a triple-quoted string or markdown-cell in your file (be sure to label these :-)
    - Yes, this will be a lot of text - that's ok!
    - You do not have to move the files
        - that could be done, but is not our goal... and is dangerous...

Two questions to answer:

- Across all recipes, which recipe calls for the most kilograms of one ingredient?
    - See the starter function, **`kgcontext`**, below and in the notebook
- What is that ingredient and how much does the recipe call for?
    - Hmmm... an interesting recipe...

Do leave your answers as the outputs of the cells in your submitted notebook. Also, be sure these answers are computed and printed out by your file when run as a script. You are welcome to use the "`if True:`" and "`if False:`" techniques as your exploration goes on.

Two more questions:

Similar to hw1pr1, you should also ask -- and answer -- (two) more questions that stretch the analysis beyond the prior questions. You're welcome to choose other ingredients/amounts to analyze for one of the questions (like the most tablespoons etc). *However*, at least one of your questions should do something a bit different, e.g. asking which recipes are the longest or the shortest, which cook in the hottest oven, or sorting all the files that cook in under 40 minutes into their own directory, or something else entirely: serious and/or whimsical always welcome.

Especially creative questions/answers will certainly be called out for extra attention :-)

When you submit your script, be sure

a) it describes, in markdown/other comments, the three questions you chose, and
b) it shares what the answers were (don't erase the cells' outputs), and
c) it can run and show them off when the notebook is placed among those files :-)

Please submit only your hw1ec.ipynb file, with the outputs of your cells present.
We have the recipes -- and ingredients!

Good luck with homework #1, everyone!