Problem Set 6: More complex neural networks CS328, Fall 2018, Anna Rafferty

This problem set has two problems. You should complete these problems using paired programming with the partner you were assigned for HW4/HW5 (or alone if you were not working with a partner for HW4/HW5). Paired programming means you and your partner must work on all parts together, at the same computer, trading off who is controlling the keyboard and mouse. Written answers should be discussed and written up together. If you work with a partner, only one of you should turn in your submission on Moodle. Each of you should submit a separate collaboration form.

Due date: All questions are due at 10PM on Friday, 19 October 2018. Please submit a zip file on Moodle. Zip up the directory containing your notebook, including the data directory, and your python module; please also include an html or pdf export (to get a pdf, use Print as PDF from the Print dialog box) to allow me to quickly glance at your answer - do not worry if the formatting in the export is odd, as grading happens based on your notebook. **Starter files:** The starter files for this assignment are available here.

- 1. Learning a grammar with a recurrent neural network. Open the notebook CS328-RNN.ipynb and follow the directions in that notebook.
- 2. Comparing people's similarity judgments to similarities based on a ConvNet representation. Open the notebook CS328-ConvNet.ipynb and follow the directions in that notebook.