Computer Science 4140 Midterm Question 1

<u>Ethics policy reminder</u> (from the course syllabus): It is considered **CHEATING** to obtain assistance other than from the instructor for exam questions (and especially for the answers!).

<u>Computing environment reminder</u> (from the course syllabus): Programs must be executable on the department virtual machine (xlogin.cs.ecu.edu) using Python version 3.4.1 with the Linux Operating System.

For this problem, you should use the entire Brown corpus and the Universal tagset (Table 2.1 from Chapter 5) to answer the following two questions.

- 1. Which parts of speech <u>never</u> immediately follow a conjunction (a word with part of speech tag CONJ)?
- 2. Excluding NOUN and VERB, which are the three most frequent parts of speech that immediately follow a CONJ word?

Note: you will write your answers to these questions as the answer to the first question on the inclass midterm.

Program Requirements

- Name your program *mt1.py*
- Per the computing environment requirement, I should be able to execute your program on our Linux server with the command line *python3 mt1.py*
- Your program should produce two lines as output --- the answers to the questions. In both cases, you should simply output the appropriate contents of the variable that contains the answer to the question.
- In order to receive full credit, your program must make appropriate use of Python programming constructs that make explicit loop writing less necessary. In particular, your program should not explicitly specify a *for* loop. Any use of *for* should be within the context of a list comprehension or generator expression.

Program Deadlines

March 3, 09:00 A.M.

Deadline for submitting completed program. The *<assignment_number>* should be *mt1*.

Program Evaluation

This question is worth 20 points. Your grade on this question will be weighted as follows:

Code Correctness 70%
Coding Style and Documentation 30%