1. Top-down parsers posit a rule based on the current node before looking at the next word to be parsed. Consider a sentence like *The mouse in the corner is staring at me*, and a rule which says $\text{NP} \rightarrow \text{NP PP}$. Explain how this rule could lead a top-down (but not a bottom-up) parser to posit an infinite number of analyses.

2. Do question #6 in chapter 2 of the textbook (p. 66) ... but, instead of evaluating spelling errors, evaluate grammar errors.

3. Do question #1 on p. 87 of the textbook.

4. Do question #2 on p. 87 of the textbook.

5. Do question #3 on p. 87–88 of the textbook.

6. Interview someone taking a language course here at Indiana.

   (a) How far along are they in their acquisition of this language?
   
   (b) Identify a problematic area in their language learning. In particular, walk me through at least 2 example sentences where they received negative feedback and explain what happened.

   (c) Design an exercise that would address their need. Consider the following in designing the exercise:

   • What kind of exercise best addresses their particular problem?
   • What kind of feedback do they prefer?
   • What level of users would this be appropriate for?
   • Can this be implemented on a computer, and if so, what technology is needed? Specifically, what kind of NLP technology is needed?