## FLEX & YACC Big Homework

Please add commentaries inside the code or a readme .txt explaining what you did.

- 1. Extend the exercise done in HW9 (Lab Flex) by also adding a counter for the number of pronouns, verbs, adjectives, nouns, prepositions, and digits. (Hint: the count variables should be added in the 1<sup>st</sup> section of the code and the yywrap() should be put in the 3<sup>rd</sup> section) **1.5p**
- 2. Create a flex file which recognizes if a given string is a word or a number. (Hint: Not like the vowel exercise, here we have 3 possibilities: word, number, other)

  1.5p
- 3. Create a flex file which recognizes if a given string is an email address. **2p**
- 4. Create a flex file which counts how many words start with a capital letter. **2p**
- 5. Make calculator also run with float numbers. **2p**
- 6. Create a calculator (multiplication, addition, division, extraction) for binary numbers. **1p**