

# CSC344 – Assignment 5

## Microproject

Write a Python program which takes a single argument — a directory name. Your program will, for every file in the directory, count the number of lines in that file using the Unix command `wc`. Then, write to the console each file name and its number of lines.

## Main Project

Write a Python program that collects, summarizes, and e-mails all the programming assignments for this course. Specifically, assuming the programs are in subdirectories  $a_1, a_2, \dots, a_5$  of directory `csc344`, your program should:

- create a `summary_ai.html` file for each  $a_i$ , which contains (in reasonably formatted, valid HTML):
  - the name of each source file (linked to the file itself), along with the number of lines long the file is, and
  - a list of all identifiers used in the program (class, function, rule, variable etc names), omitting duplicates. You do *NOT* need to specially filter keywords or builtin functions;
- create a valid HTML web page in the `csc344` directory called `index.html` with links to each of the summary files;
- create a zip file containing all assignment sources, but excluding non-sources (executables, `.class` files, etc). Also included should be the html files created above. Be sure the links in the webpages work after extracted;
- prompt the user for an email address and send the zip file.

## Dev Environment / Useful Resources

PyDev (<http://www.pydev.org/>) + Eclipse + Python 3.6.3

Regular Expressions in Python 3.6 (<https://docs.python.org/3/howto/regex.html>)

Regular Expression Debugger / Tester (<https://regex101.com/>)



