Dynamic 2D Arrays

- Read in an input file whose name is given as the second argument on the command line.
  - If no file exists, prompt the user for the filename

- Open the file.
  - Count the number of lines in the file
  - Each word will be on its own line.
  - No line will be larger than 500 characters.

- Create a ragged 2D array.
  - The number of rows will be equal to the number of lines in the file.
  - Each row will be an array of the appropriate size to hold the word read in.
  - Copying the word into each created row.

- After all words have been read in:
  - Close the file
  - Loop through the 2D array and create a histogram of the word lengths.

- Print to the screen, the longest word and its length, the shortest word and its length, the average word size.

- Clean up your 2D array

- Exit the program

Specifications

- Use a 3 file format with main being named cscd240_w13_lab9.c
- Create a basic makefile
- Use modularity

To Turn In:

A zip file:

  - All C code and makefile
  - Your testing files
  - Output run named cscd240_w13_lab9out.txt