**ENE150_HW06** due Thursday 4/4 before 11:59pm (8+ points)

*Rules for homework structure (separate directories for each problem) and submissions (yourlastame_ENEE150_Hwxx.zip) remain the same, but you will now design your own set of files, functions, and Makefile for the problems, and your choices here will be considered as part of your score on the problem.*

**Problem1/ binary tree**

This problem requires you to write a recursive function to put the contents of the word list in words2.zip into an ordered binary tree. You should create an array of word pointers to the words in the list as was done in the QSort homework, then put the word pointers into the ordered binary tree using the boringness metric . When the tree is complete, output the 200 least boring words in the tree to the console. Deallocate the complete tree structure before exiting the program.

**Problem2/ linked list**

Given an arbitrary point within one of the color regions of the butterfly, create a linked list of the points in the black contour line around that color region, then generate a .BMP from points in the linked list which displays them as a black-on-white contour.

**Fun extra credit/ smoothed contour**

Generate a new linked list from the data in your list from Problem 2 which improves the color region contour. Display the improved contour n a new .BMP created from the new list.