

Homework #5

- * **Topic for your class project.** You need to tell me what the planned topic is for your class project by next Monday (if you're taking the class for credit).

- * Problem 1 - Histograms

In this homework you will write a program to compute a histogram of the numbers in a text file. Note that you are not expected to produce graphical output, just display the computed frequency table (<http://en.wikipedia.org/wiki/Histogram>). The user should provide (you can ask for the values any way you like):

- minimum and maximum values for the histogram
- number of bins in the histogram
- name of the file containing the numbers (a single number per line)

The program should read the numbers, count the number of values in each bin, then print out the histogram (bin min/max and number of elements in that bin for each bin in the histogram (even empty ones)).

- * Bonus problem (not required) - Come up with a clever way of rendering the histogram output without using graphics (just text)
- * Bonus problem #2 (not required) - Rather than asking for the min, max and number of bins, see if you can make the program select intelligent values itself.