EE 107 Homework 6: Due 1 Apr 13

1) The Fibonacci numbers are 0,1,1,2,3,5,8,13,… where each number is the sum of the two preceding numbers. Write a program that declares an array named *fib_numbers* of length 40 and fills the array with the first 40 Fibonacci numbers using a loop. Then prints the numbers to the screen.

2) Write a declaration for a two-dimensional array named *temperature_readings* that stores one month of hourly temperature readings. (For simplicity, assume that a month has 30 days.) The rows of the array should represent days of the month. The columns should represent hours of the day.

3) Assuming the array of problem 2) contains valid data, use it to construct a program fragment that computes the average temperature for a month (averaged over all days of the month and all hours of the day).

4) Write a program to read in a sentence from the user (maximum 80 characters including punctuation) and writes the sentence to the screen with every word having the first letter capitalized. For example:

Enter a sentence: Hello. I am writing this line!
Hello. I Am Writing This Line!

5) Write a program to request a first and last name from the user and write to the screen the last name then the initial of the first name separated by a comma and ended with a period. For example:

Enter name: Jim Thorp
Thorp, J.

Submit your code and a screenshot of your code execution. Do not forget to use comments and the comment header as described in class.