**CS299 (Yang) Project #4 (50 points)**

# Practice: Lists and file input/output

Problem: Temperature data processing

Problem Specification:

1. A data file contains a list of temperatures. Write a function getTemp() that asks the user to enter a file name, opens the file, and reads the data from the file to a list. The function returns the list.
2. Write a function getHighest( tempLst) that takes a list of temperatures as parameter and returns the highest temperature from the list.
3. Write a function getLowest (tempLst) that is similar to the getHighest function but returns the lowest temperature.
4. Write a function getAverage(tempLst) that is similar to the above two functions but returns the average temperature.
5. Write a main function (or main program codes) to call above functions for reading in data from a file, calculating highest, lowest, and average, then save the highest, lowest, average, followed by original data set to an output file.

Testing Requirements:

1. Test 1: read data from SoCalTemp.txt and save output to SoCalOutput.txt
2. Test 2: read data from NoCalTemp.txt and save output to NoCalOutput.txt

Submission requirement:

1. Upload your Python program and two output files to blackboard along the Project 4 link.

Bonus Problem (10 points)

Instead of entering file name, browse input and output files from file directory.