# Algorithm Makeup
# Due by 11:00 pm on 5 pm on 4/17

Create an PDF or NOTEPAD file that states the purpose in your own words, specify input that is needed, expected output, and the step by step process that will obtain the output from the input (the algorithm) for each or the problems below. Also specify test data that can be used to all the scenarios described for each problem.

**Problem 1:** Given a two dimensional array containing 10 rows and 14 columns corresponding to 14 factories producing materials 10 compositions. The array is filled with thermal conductivity measurements. Write a process to find the average thermal conductivity for all 140 measurements and the average thermal conductivity for each composition.

**Problem 2:** Write a process (do not create a program) that will allow the user to enter the values for two one-dimensional arrays that are in parallel. The first array will contain the sample IDs for the materials. The second array will contain the compressive strength of the materials. Determine the minimum compressive strength and the corresponding sample ID plus the maximum compressive strength and the corresponding sample ID,

**Program 4:** Write a process (do not create a program) analyze the data in a two-dimensional array. The array will be a 4 by 7 array (4 rows and 7 columns) containing the daily intake of food for 4 dogs each day for a week. The maximum daily intake on each day and which dog the maximum intake corresponded to.