# CS 255 Computer Science II Spring, 2022

**Assignment #5**

**Value: 20 points**

In order to provide anonymity for his surveys, Professor Al Gorthym of the statistics department would like to assign a random number to each seat in his classroom. He would like you to write a little program to handle this for him.

He would like your program to work for a classroom of any size, so your solution **must** use a 2-dimensional dynamic array. Your main program should ask the user for the size of the classroom (number of rows along with number of seats per row) and the largest maximum number to be generated. Numbers generated will be in the range [1..MAX].

The program should continue asking for user input until valid data has been entered. For example, if the user entered 3 rows by 5 students per row and a maximum value of 10, it wouldn’t be possible to generate unique numbers for each student. When the data is valid, allocate the space for your 2-D dynamic array.

Your program **must** then call four functions:

* One to generate the data and store it in the array. Be sure you don’t repeat any numbers
* Display the data in a tabular format
* Display the smallest, largest, and mean value
* Free up the memory that was allocated to the array

**NOTE**: Program submissions will be tested using plagiarism-detection software. Be sure to do your own work. If you have questions, please ask your professor or see one of the class tutors.