*CSE 102*

**Files**

1. Write a program which reads structured numeric data from a text file and store it in a two-dimensional array. You can assume that the file begins with a line consisting of 2 integers separated with a single space, where the first integer depicts the number of rows and the second one, the number of columns in the file (excluding the first line). The real content of the file begins with the second line, where line separators and single spaces separate lines and columns respectively.
2. There is a very simple ASCII text-based gray-scale image format called “.pgm”. Visit this [link](https://people.sc.fsu.edu/~jburkardt/data/pgma/pgma.html) and read about the format, and download some example images. Google “ascii art” if you are hearing the term for the first time. Write a program which reads .pgm images and converts them into their ascii art versions. You may consider replacing a pixel value with an ASCII character depending on the value of the pixel (like maybe “#” for 0-100, “+” for 150-200, “.” for 200-255 etc.).
3. Write a program which jumps from file A to file B where the absolute path of the file B is the content of file A. The jumps continue until the program confronts an empty file. Note that your program may loop forever in some cases.
4. Write a program which preprocesses a given text file. Your program should search for the include directives “\include absolutePath” (without quotes) throughout the file and replaces them with the contents of the file located at absolutePath. Note that the replaced file may also contain other include directives. Your program should expand all the include hierarchy at once.
5. Write a program which reads a text file and counts the number of occurrences of each letter.