

CSci 5607, Spring 2022
Assignment 0: Working with ASCII images
Due: Tuesday Jan 25th 2022

Name _____

Score (out of 35) _____

____ The program generates a valid output file in ASCII PPM format. The name of the output file, if it is generated by the program, ends with the suffix .ppm. All of the pixels in the output image are explicitly assigned a color by the program, and the generated file can be read and displayed, without any errors, using a standard tool such as GIMP. (15 pts)

____ The program accepts the name of the input file as a command line argument. The name of the output file is either generated automatically by the program using the name of the input file, or it is accepted as a command line argument. Thus, the program is capable of being run multiple times on different inputs, producing different outputs, without needing to be recompiled. (5 pts)

____ The program uses the information in the input file to define the size of the output file, and it is robust to unexpected input. Specifically, the program reads image size information from the input file, and correctly uses that image size information when generating the output file. The program responds gracefully to "bad input", such as the absence of an expected input file, the absence of an expected keyword, the presence of extraneous information, the lack of expected information, or 'invalid' content such as non-positive numbers for the width and height. By 'robust' and 'graceful' I mean that the program generates a suitable error message and terminates cleanly without 'bombing' or 'crashing'. (10 pts)

____ The program is fully commented and/or the student has provided a readme file that adequately describes what the program does. (5 pts)

____ For 5 points extra credit, the student's program generates an 'interesting' image. 'Interesting' will be flexibly defined to include anything that represents an extra effort beyond simply filling each pixel with the same color. Students are encouraged to experiment with creating interesting patterns using simple mathematical functions. (5 pts)