

Assignment 0: Working with ASCII images

Due Date: Sept. 14, 2015

In this assignment, you are asked to write a short program that creates an image in ASCII PPM format. Your program should read an image description (consisting of the image height and image width) from a text file, and generate an output image. The name of the output image should be automatically defined to be the same as the name of the input file, except using the suffix **.ppm** instead of the suffix **.txt**. You are free to use whatever means you like to define the contents of the output image. If you have time and are so inclined, you can earn extra credit by doing something creative. If you don't have time, you can just fill all pixels with the same color and still earn full credit.

Detailed instructions:

1. Please use the following syntax to define the image size in your input file:

```
imsize   width  height
```

2. Please use the following syntax to define your output image:

```
P3  
# any comments you want to include  
width height  
255  
r00 g00 b00 r10 g10 b10 r20 g20 b20 ...
```

Please note that the pixel colors are defined as (r, g, b) triples, and should be listed in row major order. This means that the first three entries represent the red, green and blue components of the color of the upper leftmost pixel in the image, the second three entries represent the color of the adjacent pixel to the right, and so on. Your file will need to specify exactly one color triple for each pixel in your image. Try to keep your line length under about 80 characters, or approximately five pixels per line. It's also okay to put each pixel on its own line.

You can use the free program GIMP to view your images. GIMP is a general-purpose image editing tool that can also be used to create images, and to convert images from various other formats into ascii PPM format.

What you should turn in:

- a readme file that describes your what your program does
- all of your source code, clearly commented
- one ascii PPM image created by your program