

TDT4200 - Fall 2020 - Problem set 0

August 2020

Although this assignment may be trivial to those already familiar with C, this exercise is mandatory to ensure everyone has working compilers and knows how to compile their programs. It will be graded pass/fail.

Deadline is friday 4th September.

1 Problem description

In this assignment you will alter a bitmap image. You will load a provided image and make changes to it. Exactly how you alter the image is up to you, but some possibilities are inverting the colors, flipping the image, or remapping the colors. The final image should be recognizable. You must add at least one method (procedure or function) to the program. You must resize the image to double the image size (i.e. double the resolution in each direction). Simple interpolation (duplicating pixels) is a sufficient strategy for filling the new pixels. You must change the color of the image in a way of your choice. Comment your code!

You must also create an automated method of compiling the code by use of a makefile. Required work Your delivery **MUST** contain a makefile to produce an executable named "bitmap". This executable should produce an image named "after.bmp" when run. The work must be done in the language C. No parallelization is required at this stage. A starting point for the code is available from on blackboard. It contains functions to load and save a bitmap image.