

AMS 148 Chapter 5: Reduce and Scan

April 25, 2018

For this homework you will be required to create a typed report. You will also need to include annotated code for each problem.

1 Exercises From Chapter 3

Both problems from the end of Chapter 3 are required. Be sure to create a table illustrating the times. For extra-credit include the relative speedup, between each implementation and a serial version.

2 Exercises From Chapter 4

Problem 4.1 is required. In this problem illustrate the timing and speed up in a table as in the notes. Comment on what you had to change to get the shared matrix multiplication to correctly work with a tranposed matrix.

The last problem is of your choice between problem 4.2 and 4.3. If you choose 4.2, use the Cimg library to access the RGB channels as we did in the grayscale code.