

Homework 4

May 22, 2018

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

In this homework you will need to:

1. Write a max and min reduce algorithm to find the min and max of the data included
2. Produce a histogram of size 1024, using the bins ranging from min to max with bin width

$$\frac{\text{max} - \text{min}}{1024}$$

3. Sum Reduce the histogram, and then divide the histogram by the sum to create a probability distribution
4. Sum Scan the PDF to create a CDF of the data.

In your report you need to include figures of the PDF and the CDF, and include the value of the mode. The data you will use is called data.txt . This assignment is due Tuesday June 5th, via email.