

Assignment 4

Due: 11:59 PM, March 13

A. Solve Problem 2.23 in the textbook (1st edition).

2.23. In our application of Foster's methodology to the construction of a histogram, we essentially identified aggregate tasks with elements of `data`. An apparent alternative would be to identify aggregate tasks with elements of `bin_counts`, so an aggregate task would consist of all increments of `bin_counts[b]` and consequently all calls to `Find_bin` that return `b`. Explain why this aggregation might be a problem.

B. Describe how to install MPI and `mpi4py`. You may choose any MPI implementation, and any operating system. Describe all steps with commands executed and/or screenshots.

C. Run attached `first-example.c` and `first-example.py` using the MPI environment above. Show the output after running the two files.