CS599: High Performance Computing

Assignment 2: Distance Matrix

Due: See BBLearn

Preliminaries

You are expected to do your own work on all homework assignments. You may (and are encouraged to) engage in discussions with your classmates regarding the assignments, but specific details of a solution, including the solution itself, must always be your own work. See the academic dishonesty policy in the course syllabus.

Submission Instructions

You should turn in an electronic archive (.zip, .tar., .tgz, etc.). The archive must contain a single top-level directory called CS599_aX_NAME, where "NAME" is your NAU username and "X" is the assignment number (e.g., CS599_a1_mg1234). Inside that directory you should have all your code (no binaries and other compiled code) and requested files, named exactly as specified in the questions below. In the event that I cannot compile your code, you may (or may not) receive an e-mail from me shortly after the assignment deadline. This depends on the nature of the compilation errors. If you do not promptly reply to the e-mail then you may receive a 0 on some of the programming components of the assignment. Because I want to avoid compilation problems, it is crucial that you use the software described in Assignment 0. Assignments need to be turned in via BBLearn.

Turn in a single pdf document that outlines the results of each question. For instance, screenshots that show you achieved the desired program output and a brief text explanation. If you were not able to solve a problem, please provide a brief write up (and screenshots as appropriate) that describes what you tried and why you think it does not work (or why you think it should work). You must provide this brief write up for each programming question in the assignment.

This pdf should be independent of the source code archive, but feel free to include a copy in the top level of that archive as well. Let me know if there are problems uploading multiple files to BBLearn.

Distance Matrix

The instructions for this assignment can be found in Module 2 at the following link: http://jan.ucc.nau.edu/mg2745/pedagogic_modules/courses/hpcdataintensive/.

- Complete Questions 1–9 (in bold face) in the module.
- Complete the 4 tables described in the module.
- You will submit source code corresponding to the 2 programming activities using the following names: `distance_act1_NAME.c` and `distance_act2_NAME.c`.
- You will submit all job scripts you used that correspond to the programming activities and associated tables.

Grading

- Questions 1–9 [2.25 points (0.25 points for each question)]
- Tables 1–3 [2.25 points (0.75 points for each table)]

- Table 4 [0.5 points]
- Correct and robust source code [5 points]. All source code must conform to the guidelines in the assignment. If you were unable to solve a particular problem using the guidelines, please note this in your pdf document.
- If you cannot meaningfully answer the questions or submit accurate data in your table because your code is incorrect, you will lose points on the questions/tables.