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SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF COMPUTER SCIENCE & MATHEMATICS
BYBLOS

CSC 447: Parallel Programming for Multicore and Cluster Systems

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Lab 4

Experiment with OpenMP

Due: March 11, 2022

Consider the sequential code for the OpenMP Count3s and PI, perform the following experiment:

1. Time sequential code

Start by running the sequential version for both programs. Run it a few times, and get a median run time in both instances. Test your code by running it with a small input size, 100. For all timing experiments run your codes with the default (no explicit size on the command line) size of 100,000,000.

2. Time the Parallel

Compile both parallel code and run both programs for the same input size for 1, 2, 3, 4, 5, 6, 7, 8 threads. See how the run times compare to the sequential version. Why do you think you are getting the results you are? Can you modify either code in order to use tasks? How?