



LEBANESE AMERICAN UNIVERSITY
SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF COMPUTER SCIENCE & MATHEMATICS
BYBLOS

CSC 447: Parallel Programming for Multicore and Cluster Systems

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Spring 2022

Lab I
Pthreads Pi

Due: March 7, 2022

Compile the source code for the `pi_pthread_0.c` algorithm, please complete the following:

1. Reproduce the serial code. Create random arrays of sizes 1000, 10000, 100000, and 10000000. What is the value of Pi? How long did it take? Plot the run-time versus the array size. Use a logarithmic scale if some of the results are too skewed to show.
2. Comment on the issue of scalability while keeping in mind whatever was discussed in the class.

Please submit your report using the provided LaTeX Template.