



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

**CSC 447: Parallel Programming for Multicore and Cluster Systems**

*Instructor: Haidar M. Harmanani*  
Spring 2022

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?