

lab 01: PThreading Basics

Instructions: The purpose of this lab is to introduce pthreading, which will be the modeling used for parallelism.

Please implement the following functions:

```
1 // Set c = a + b (for all elements.)
2 void parallel_sum_array(int num_threads, long *a, long *b, long *c, ssize_t size);
3
4 // Return the sum of all elements in the array
5 void parallel_sum(int num_threads, long *ary, ssize_t array_size);
6
7 // Sort the array
8 long parallel_sort(int num_threads, long *ary, ssize_t array_size);
```

How to turn in:

Turn in via GitHub. Ensure the file(s) are in your directory and then:

- \$ git add <files>
- \$ git commit
- \$ git push

Due Date: Sep 06, 2022 2359

Teamwork: No teamwork, your work must be your own.