Computer Science 335
Parallel Processing and HPC
Siena College
Fall 2024

SIENA*college*
Computer Science

# Lab 2: Chapter 2 Questions
### Due: 4:00 PM, Thursday, September 19, 2024

In this lab, you will focus on some key points from the readings in Pacheco Chapter 2.

You may work alone or with a partner on this lab. However, in order to make sure you learn the material and are well-prepared for the exams, those who work in a group should either collaborate closely while completing the problems or work through the problems individually then discuss them within your group to agree on a solution. In particular, the "you do these and I'll do these" approach is sure to leave you unprepared for upcoming tasks and the exams.

## Questions

- Pacheco Exercise 2.16, p. 79. You do not need to submit the program(s) you write for this, but you should write code that helps you answer the questions and mention specific numbers in your answer for part a. (10 points)

- Pacheco Exercise 2.19, p. 79. Set up an equation based on the formulas in Section 2.6, but you do not need to solve them. We will look at some math in class on Friday. (3 points)

- Pacheco Exercise 2.21, p. 80 (2 points)

- Pacheco Exercise 2.22 part a only, p. 80 (2 points)

- Discuss Amdahl's Law in relation to the program we developed for Lab 1. (3 points)

## Submission

Submission is through Canvas. You may submit a PDF of your responses or a link to a shared Google document that has been shared for write access with your instructor.

## Grading

This assignment will be graded out of 20 points.

| Feature | Value | Score |
|---|---|---|
| 2.16 | 10 | |
| 2.19 | 3 | |
| 2.21 | 2 | |
| 2.22, part a | 2 | |
| Amdahl's Law with Lab 1 | 3 | |
| Total | 20 | |