

## Lesson 5.4 Instructor Guide

1. (ppt) Slides Contain:
  - a. Learning Objectives
  - b. Explanation of the problem Sequential
  - c. Explanation of how to parallelize the problem
2. Code is written in C
  - a. How to compile and run the code is explained directly on the slides with the command line compiler instruction
  - b. The environment used :CPU type, GPU type, OS , Compiler version (gcc, CUDA, MPI, OpenMP) is also on the slides
3. (mp4) Video Lecture:
  - a. Narration of the slides
4. Code:
  - a. Implementation of the example explained in the slides
  - b. Code available for download
5. We do provide suggestions for students' questions and assessments, instructors are encouraged to use them or to design their own.
6. Type of rubric for the sample assessment.

Code Compilation	If code compiles receive 5 pts	0 points no more grading	
Code Organization	Code well commented , indented and readable 10 pts	Some comments, indentation and readable 5 points	No comments No readable 0 points
Code Running no warnings	10 points		
Code Produces correct Result	If yes 60 points		
Execution time measures provided	15		

7. Note of code : to simplify the code

`myRows=ROWS/numProcess` should return an integer, so ROWS should be divisible by `numProcess`

#### Lesson 5.4: Common Pitfalls for Students and Instructors

- Parallelizing the outer loop the one that controls iterations
- Sending/receiving the last and first column backward