

# Instructor Guide

Lesson:

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)
  3. (mp4) Video Lecture:
    - a. Narration of the slides
  4. Code:
    - a. Implementation of the example explained in the slides
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## Common Pitfalls for Students and Instructors

Students:

1. Ignoring the race condition on the `hist[]++`
2. Confusing Shared and Global memory and try to access the shared memory array (only `numberOfThreadsPerBlock wide-256`) with the `global threadIdx`