Introduction to CUDA Parallel Programming Homework Assignment 1
March, 2025

1. To write your own CPU+GPU code for the modified matrix addition as defined by c(i,j) = 1/a(i,j) + 1/b(i,j). Setting the input NxN matrices A and B (where N=6400) with entries of random numbers between 0.0 and 1.0, determine the optimal block size by running your code. You can use the sample code twqcp1:/home/cuda_lecture_2025/vecAdd_1GPU/vecAdd.cu as a template to develop your own code.

   Your homework report should include your source codes, results, and discussions. The discussion file should be prepared with a typesetting system, e.g., LaTeX, Word, etc., and it is converted to a PDF file. All files should be zipped into one gzipped tar file, with a file name containing your student number and the problem set number (e.g., r05202043_HW1.tar.gz). Please send your homework with the title "your_student_number_HW1" to twchiu@phys.ntu.edu.tw before 17:00, June 11, 2025 (deadline for all problem sets).