Introduction to CUDA Parallel Programming Homework Assignment 1
Due March 23, 2022

1. To write your own CPU+GPU code for the matrix addition with 2D grid and 2D blocks. Setting the input NxN matrices (where N=6400) with entries of random numbers between 0.0 and 1.0, determine the optimal block size by running your code for the following block sizes: (4,4); (8,8); (10,10); (16,16); (20,20); (32,32). You can use the sample code twqcd80:/home/cuda_lecture_2021/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 from your NTU/NTNU email account to twchiu@phys.ntu.edu.tw before 24:00 of the due date.