

CS 791v: Topics: Parallel Computing Fall 2011

Programming Assignment 2 Thrust: Sorting

Assigned Date 9/13/2011

Due Date

9/20/2011

Overview

For this project you are going to write a thrust program to sort several ways. It is to read in an array and then sort the elements. You will do sorting three different ways:

- Method 1: Use the thrust's sort function
- Method 2: Make a Merge Sort using thrust function calls
- Method 3: Make a Quick Sort using thrust function calls

Have a command line option to either read in the file of numbers or make a call to generate () to have thrust generate the numbers from 1 to n for you (this allows easy error checking)

Project Requirements

- A compiled and running CUDA program which times each method and prints out the times so they can be compared
- A writeup with discussion, table, and graph showing runtimes for comparison.

Recommendations

• Don't time the file I/O

Deliverables

• Bring code and Output to class for discussion.

- Have a pdf of your writeup and a zip of your code emailed to: Fred Harris and Lee Barford
 - o Firstname dot Lastname at (Fred is cse, Lee is gmail)