Parallelisation of Prime Number Generator Algorithms

Concurrent and Parallel Systems (SET10108)
Ryan O'Flaherty - 40168766

Abstract

Is this necessary? I dunno but I'm writing shit here to make myself notice it later

hey x4iiiis what's up brah

Ben Kenwright can eat my balls

Get him the fuck away from the top of that tree

Calum's saying put the spec here

	Home Spec	**Lab Spec**
CPU	AMD FX^{TM}-8350 @ 4.00GHz	Intel i7-4790K @ 4.00GHz
Cores	4 Hardware and 4 Logical	4 Hardware and 4 Logical
GPU	Nvidia GTX 750	Nvidia GeForce GTX 980
OS	Windows 10 Pro N 64-bit	Windows 10 Pro N 64-bit

dk m8

The report for Part 2 must be 12 pages maximum (including appendices but not references).

1 Introduction and Background

Parallelise 3 prime number generators that store prime numbers up to 1 billion in a file and analyse the time they take

OMP - Parallel For

What techniques did you use

SIMD

Single Instruction Multiple Data as FUQ

OpenCL

Nvidia'd oot ma nut

CUDA

Nvidia as fuck mate

2 Initial Analysis

Initial analysis of the base-line performance of the application and likely places that can be parallelised.

3 Methodology

Methodology used Description and justification of the approach used and its overall suitability and rigour.

4 Results and Discussion

Results presented Suitable performance analysis and testing documentation for the problem, including quality of presentation of the results.

5 Conclusion

Conclusions drawn Level of discussion and appropriateness of the conclusions drawn based on the results gathered.