

Runtime-efficient threaded interpolating elevation of a $n \times n$ matrix M given a lower resolution digital elevation matrix N

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I. INTRODUCTION

AFTER making the computer program from Exercise 01 run using concurrent threads, use the programming exercise from Exercise 02 to record average runtimes of estimation of a $n \times n$ matrix when using a different t number of processors.

II. OBJECTIVES

The goal for this exercise is the following:

- to determine the complexity of estimating the point elevation of a $n \times n$ square matrix with randomized values at grid points divisible by 10 when using n concurrent processors and other values of concurrent processors.
- to know why the running time of $t=1$ is higher than the average runtime that was obtained in Exercise 01.
- to figure out why higher values of n size of matrix are now possible using t concurrent threads.

III. METHODOLOGY

IV. RESULTS AND DISCUSSION

V. CONCLUSION

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