

Project 2: Parallel Fluid Dynamics Simulation

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1 Introduction

This report aims to document the implementation and analysis of a program that utilizes OpenMP to implement a computational fluid dynamics model suitable for modeling behavior of turbulent flows. This report will cover the methods and techniques utilized for implementing the fluid dynamics model using OpenMP, analyze and estimate the expected performance of the implementation, present the results from experimentation, compare and contrast the expected performance to the observed results, and conclude with insights and possible changes that could be made to the implementation

2 Methods and Techniques

3 Analysis

4 Results

5 Synthesis

6 Conclusion