

Project 3

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Abstract

This project explored solving differential equations, specifically linear second order equations, by using a couple of different methods which include LU Decomposition, Gauss Forward and Backward Substitution : General algorithm

1 Introduction

2 Description

2.1 LU Decomposition Solver

2.2 Tridiagonal Solver: General Gauss Elimination

3 Results

3.1 Accuracy

3.2 Gauss General:

3.3 LU Decomposition:

3.4 Speed of Execution