

MATRIX OPERATIONS PROGRAMMER DOCUMENTATION MUSTAFA SARITEMUR

1. Introduction

This document's aim is to give information about Matrix operation program for developers. More information can be find in Doxygen documentation.

2. The code structure overview

Code starts with including the libraries that needed after that definition of global variables follows. Then support functions come. At the end main function which calls other functions. Main function is simple and short it just calls other functions and returns 1 if it did not encounter any error, 0 if there is an error. Support functions are welcomes the user, controls input file's format, read the input file, find determinant, find solution of equation, print output to console and create a html file.

3. Operation algorithm

First user enters a file name and program controls if given format is correct then opens the file and reads input file to global variables. After that it calculate the determinant with a recursion function. Last calculation is solution of equations (gauss elimination) but if determinant is equal to "0" so that means rank don't allow for gauss elimination so this function don't operate.

4. Additional information

The code is errorproof and have unique error messages for different situations.

Input file have to be same as described in the user documentation.