**Lab # 1**

**Introduction:**

This lab is concerned with the comparison analysis of two methods for matrix multiplication;

**1) iterative method 2) Strassen Algorithm**

The efficiency of the above mentioned methods were compared and analyzed.

**Approach:**

The platform used was visual studio, and the code was implemented in C++ programming language.

**METHOD # 1:**

[ THE ITRATIVE METHOD ]

In this traditional method, the use of loops have been made. A function block was created in which two matrices were declared and multiplied. In the main body this function was called and executed.

**Matrix Population:**

The entry of matrices was randomly generated with variable size based on the user requirement.

**METHOD # 2:**

[ THE STRASSENS ALGORITHM ]

It is based on a fast calculating steps with certain pre-defined formulas.

**Conclusion:**

Complexity of iterative method is O(n^3) whereas complexity of strassens algorithm is O(n^28)

So by comparison, the algorithm method is more efficient and fast.

**Repository Link:** https://github.com/Eeman519/bliss