# Muhammad Shehzad

# Reg No. 6028

# BESE-4A

# Lab 2

## Introduction:

In this lab 2 types of matrix multiplication are implemented.

1. Iterative multiplication
2. Strassen’s algorithm multiplication

Test are also written. To run tests click test class and compile it.

## How to Run:

To run Iterative multiplication /Strassen’s algorithm multiplication open Netbeans and add java project. Copy given class and compile it. Select option from keyboard when prompt.

* Enter 1 for Iterative multiplication. Enter no of rows and columns and check results.
* Enter 2 for Strassen’s algorithm multiplication. Enter matrix size and check results
* To exit enter 3 at any time.

## Analysis:

|  |  |  |
| --- | --- | --- |
| Matrix size | Iterative multiplication (sec) | Strassen’s algorithm multiplication (sec) |
| 100 | 0.006985314 | 0.141075627 |
| 500 | 1.459868197 | 5.553286109 |
| 1000 | 19.807502028 | 37.411711137 |

Github repository:

https://github.com/Muhammad-Shehzad/Ap\_lab1\_matrix