**Documentation**

**Introduction:**

In this lab we were asked to use last lab code of matrix multiplication then use that code we have to implement it smartly so that there should not be any memory leakage or dangling pointers remains in the code.

For doing this we have to create our own library for Matrix Multiplication. The matrix elements are been populated by fix value as we have to do for testing. Along with that we were supposed to unit test case for this.

**Approach:**

I used auto\_ptr as we were supposed to make that there is not remaining memory leaks remains.

**How to Run:**

Open the cpp file and execute it in any Compiler.

**Analysis:**

My analysis shows that the strassen method for multiplication is more efficient but it is also more complex to implement then simple iterative method.