## **Matrix Multiplication Program**

## **Overview**

This program performs matrix multiplication using two different parallelization strategies:

- 1. **Element-wise Thread Computation:** This strategy assigns a thread to compute each element of the output matrix individually.
- 2. Row-wise Thread Computation: This strategy assigns a thread to compute each row of the output matrix.

## Requirements

- Programming Language: C/C++ (This program is written in C++)
- Compiler: Any C/C++ compiler that supports multi-threading (e.g., GCC, Clang)
- Operating System: Compatible with most major operating systems (Windows, Linux, macOS)

## **Usage**

- 1. **Compilation:** Compile the program using your preferred C/C++ compiler. For example: Note: The -pthread flag is used for enabling multi-threading in GCC.
- 2. **Execution:** Run the compiled program with the desired input file that has matrix dimensions and its entries