- No "Collaborative" effort allowed. Students are expected to work themselves.

- Its okay to discuss, but not okay to share code or ask others to code for you!!!

- Penalty for late submissions.

- *Severe penalty for academic dishonesty.*

1. Create two matrices, A and B, each of size (N × N). Initialise the matrices to random floating point numbers. Write an OpenMP code for computing $C = AB$ and then transforming C into an upper triangular matrix. Report the times taken for the codes. Vary the size of the problem from $N = 100 \ldots 10000$.

2. Now for the same problem, write an MPI code for computing $C = AB$ and then transforming C into an upper triangular matrix. Report the times taken for the codes. Vary the size of the problem from $N = 100 \ldots 10000$. Vary the number for MPI process from 2 to 8. Using a single desktop is okay.

3. Write a report of your results obtained. Be sure to specify the configuration of your machine and OS.