

- 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  $(N \times N)$ . Initialise the matrices to random floating point numbers. Write an OpenMP code for computing  $C = AB$ . Report the times taken for the codes. Vary the size of the problem from  $N = 100 \dots 10000$ .
  2. Now for the same problem, write an MPI code for computing  $C = AB$ . Report the times taken for the codes. Vary the size of the problem from  $N = 100 \dots 10000$ . 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.