

CS 3006 Parallel and Distribute Computing
Assignment #2
Fall 2022

Due Date: Friday 11th NOV, 23:59

Q1 [OpenMP]: Write a Parallel C++ program using OpenMP Library to calculate the WORDCOUNT of some text file. Your program must have a reduction clause, and also display the local results of each thread

Q2 [MPI]: Write a Parallel C program using MPI Library to calculate the WORDCOUNT of some text file. Your program must also display the local results of each process

Q3 [MPI]: Write an OpenMp program that calculates WORDS FREQUENCY from a text file. Display the local results on Screen and final results in an output text file.

Q4 [MPI]: Write an MPI program that calculates WORDS FREQUENCY from a text file. Display the local results on Screen and final results in an output text file.

Q5 [OpenMP | MPI]: Elaborate the difference between followings with the help of OpenMP Code, paste the snapshot of results also.

- a) Static Schedule vs Dynamic Schedule in OpenMP
- b) Barrier Vs NoWait in OpenMP
- c) Broadcast() vs Scatter() in MPI
- d) Gather() vs Reduce() in MPI
- e) Broadcast() vs Alltoall() in MPI