

Assignment 2: MPI

1. Estimate the value of Pi using the Monte Carlo method and demonstrate basic MPI functions.
2. Matrix Multiplication using MPI. Consider 70X70 matrix compute using serial sequential order and compare the time. For computing the time use `double start_time, run_time; run_time = omp_get_wtime() - start_time;` Time in seconds
3. Parallel Sorting using MPI (Odd-Even Sort)
4. Heat Distribution Simulation using MPI
5. Parallel Reduction using MPI
6. Parallel Dot Product using MPI
7. Parallel Prefix Sum (Scan) using MPI
8. Parallel Matrix Transposition using MPI