

Programme	:	B.Tech.(CSE)	Semester	:	Fall '22-23
Course	:	Parallel and Distributed Computing	Code	:	CSE4001
Faculty	:	R. Kumar	Slot	:	L9+L10

- 1. Write a program in OpenMP to find out the largest number in an array of 1000000 randomly generated numbers from 1 to 100000 using reduction clause. Compare the versions of serial, parallel for and reduction clause.
- 2. Write a program in OpenMP to find out the standard deviation of 1000000 randomly generated numbers using reduction clause. Document the development versions of serial, parallel for and reduction clause.
- 3. Write a multithreaded program using OpenMP to implement sequential and parallel version of the Monte Carlo algorithm for approximating Pi. Compare the results of sequential, loop-level parallelism and reduction clause with 10000000 samples.