Assignment 2

Last date of Submission: 15/04/2023

- 1. Write a simple OpenMP program to demonstrate the use of 'for' clause.
 - Sum of n' array elements
 - Product of n' array elements
- 2. Write a program for parallel quick sort algorithm.
- 3. Write a program for pi calculation using openmp/mpi.
- 4. Write a C program to handle message passing in the MPI application interface, which allows processes to communicate with one another.
- 5. Create two processes that will pass the number 17 from one to the other.
- 6. You should first create three matrices A, B, and C then initialize A and B to some values of your choice. In your code, try to improve the performance by (re)using the same set of threads for initializing A and B and for calculating C
- 7. Consider two one-dimensional arrays, each of size of 5. We will then create 5 threads. Each thread will be responsible for one addition operation.
- 8. Design a distributed application using Message Passing Interface (MPI) for remote computation where client submits a string to the server and server returns the reverse of it to the client.