



K. K. Wagh Institute of Engineering Education and Research, Nashik.

Department of Computer Engineering

Academic Year: 2023 – 2024

Semester: II

Course Name: Laboratory Practice V

Course Code: 410255

Class: BE-A and B

Practice assignment list

1. Design and implement Parallel Breadth First Search based on existing algorithms using OpenMP. Use a Tree or an undirected graph for BFS.
2. Design and implement Parallel Depth First Search based on existing algorithms using OpenMP. Use a Tree or an undirected graph for DFS.
3. Implement Min, Max, Sum and Average operations using Parallel Reduction.
4. Write a program to implement Parallel Bubble Sort using OpenMP. Use existing algorithms and measure the performance of sequential and parallel algorithms.
5. Write a program to implement Parallel Merge sort using OpenMP. Use existing algorithms and measure the performance of sequential and parallel algorithms.
6. Write a program to implement Parallel Quick Sort using OpenMP. Use existing algorithms and measure the performance of sequential and parallel algorithms.
7. Write a program to implement Parallel matrix matrix multiplication using OpenMp.
8. Write a program to implement Parallel matrix vector multiplication using OpenMp.
9. Linear regression by using Deep Neural network: Implement Boston housing price prediction problem by linear regression using Deep Neural network. Use Boston House price prediction dataset.
10. Binary classification using Deep Neural Networks Example: Classify movie reviews into positive" reviews and "negative" reviews, just based on the text content of the reviews. Use IMDB dataset.
11. Convolutional neural network (CNN): Use MNIST Fashion Dataset and create a classifier to classify fashion clothing into categories.