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| 1A | Design and implement Parallel Breadth First Search based on existing algorithms using OpenMP. Use a Tree or an undirected graph for BFS |
| 1B | Design and implement Parallel Depth First Search based on existing algorithms  using OpenMP. Use a Tree or an undirected graph for DFS . |
| 2A | Write a program to implement Parallel Bubble Sort using OpenMP. Use existing algorithms and measure the performance of sequential and parallel algorithms. |
| 2B | Write a program to implement Parallel Merge sort using OpenMP. Use existing  algorithms and measure the performance of sequential and parallel algorithms. |
| 3 | Implement Min, Max, Sum and Average operations using Parallel Reduction. |
| 4 | Implement Matrix Multiplication using CUDA C |
| 5 | 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. |
| 6 | . Classification using Deep neural network (Any One from the following)  1. Multiclass classification using Deep Neural Networks: Example: Use the OCR letter recognition datasethttps://archive.ics.uci.edu/ml/datasets/letter+recognition  2. 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 |
| 7 | Convolutional neural network (CNN) (Any One from the following)  • Use any dataset of plant disease and design a plant disease detection system using CNN.  • Use MNIST Fashion Dataset and create a classifier to classify fashion clothing into categories. |
| **4** | Recurrent neural network (RNN) Use the Google stock prices dataset and design a time series analysis and prediction system using RNN. |

LP V List of Programs