(HPC 1): Design and implement Parallel Breadth First Search and Depth First Search based on existing algorithms using OpenMP. Use a Tree or an undirected graph for BFS and DFS

(HPC 2): Write a program to implement Parallel Bubble Sort and Merge Sort using OpenMP. Use existing algorithms and measure the performance of sequential and parallel algorithms

(HPC 3): Implement Min, Max, Sum and Average operations using Parallel Reduction

(HPC 4):Write a CUDA Program For: 1.Addition of Two Large Vectors
                                                          2.Matrix Multiplication Using CUDA C

(HPC 5 Any One)

1. Evaluate Performance Enhancement of Parallel Quick Sort Algorithm Using MPI.
2. Implement Huffman Encoding on GPU.
3. Implement Parallelization of Database Query Optimization
4. Implement Non-Serial Polyadic Dynamic Programming With GPU Parallelization

(DL1): **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.

(DL 2 Any One)

1. **Classification using Deep neural network:** Multiclass classification using Deep Neural Networks: Example: Use the OCR letter recognition dataset https://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

(DL 3 Any One)

1.**Convolutional neural network (CNN):** Use MNIST Fashion Dataset and create a classifier to classify fashion clothing into categories.

2.**Convolutional neural network (CNN):** Use any dataset of plant disease and design a plant disease detection system using CNN.

(DL 4 Any One)

1.Project:Human Face recognition
2.Projcet:Gender and Age Detection:Predict If a person is a male and female and also their Age.
3.Colorizing Old B&W Images :Color Old Black & White Images To Colourful Images.