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Serial. No.	Topic.	Date.	Signature.
1)	Exploring the Deep Learning Platforms & Frameworks	31/07/2025.	
2)	Implement a Classifier using an open-source dataset	7/8/2025	
3)	Study of Classifiers with respect to Statistical Parameter	7/8/2025	
4)	Build a simple feed forward network to recognize handwritten character	14/8/2025	
5)	Study of Activation Functions and its role	9/9/2025	9/9
6)	Implement gradient descent and backpropagation in deep neural network.	13/9/2025	
7)	Build a CNN model to classify Cat & dog image	13/9/2025	
8)	Experiment using LSTM	13/9/2025	
9)	Build a Recurrent Neural Network	13/9/2025.	
10)	Perform compression on MNIST	02/11/25	
11)	Experiment using VAE		
12)	Implement a DCGAN		
13)	Understand pre-trained model		
14)	Transfer Learning		
15	YOLO Model		

Completed

Exp-14 - Transfer Learning

Aim: To implement a pre-trained CNN model (Resnet18) as a feature extractor using transfer learning.

Objective: To use learned features from a pre-trained model to train a classifier on a new dataset efficiently.

Algorithm:-

1) Import required libraries.
2) Load a pre-trained CNN
3) Freeze convolutional layers.
4) Replace the final classification layer.
5) Train the new layer on small dataset.
6) Evaluate the model.

Observation:- The model converges faster and achieves higher accuracy using pre-trained features.

Result: The experiment was carried out successfully.

Model ready on: cpu
Training Accuracy: 92.4%
Validation Accuracy: 90.8%.
Loss: 0.24