

# (B.TECH) Semester-VII AY 2023-24

**DL Lab Assignment No. 08**

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| **Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **PRN No.: \_\_\_\_\_\_\_\_\_\_\_\_** |
| **Date: (Perform) \_\_\_\_\_ & (Submitted)\_\_\_\_\_\_** | **Faculty:** |

**Problem Statement:** Implement a prediction model using Deep Learning method.

**Objectives:**

1. Understand the architectural features of pre trained models
2. To implement the prediction model for data using pre trained architecture like AlexNet, VGG.

**Theory:** (describe the following)

# Operations to be performed:

1. Import the required Python libraries and dataset.
2. Normalizing dataset.
3. Identifying the pretrained model to be used.
4. As per the need, fine tune the pretrained architecture.
5. Train the model with training dataset.
6. Predict the model with testing dataset.
7. Model performance visualization in terms of accuracy and loss.

# Program code: (paste your program code)

**Output: (paste output screen & graphs plotted)**

# FAQs:

* 1. Which are the ways to fine tune the pretrained architecture/ model?
  2. What is the difference between Convolutional neural network and Recurrent neural network?
  3. What is the difference between Recurrent neural network and Long Short-Term Memory Network?

# Conclusion:

The architecture of pretrained model were studied and the implementation of prediction model performed successfully.