Mid-Term Project

# **Task 1 (Individual):**

You need to implement a machine learning model to classify different objects. For this task you will be using the CIFAR-10 dataset. This dataset can be downloaded from the link bellow.

<https://github.com/YoongiKim/CIFAR-10-images>

After downloading the dataset you need to read all the training images and store in a list along with the corresponding labels. Then use the test images and compute the distance (Manhattan / Euclidian) of each image from all the 50000 training images. Then apply KNN to do the prediction. Finally, you need to produce a graph where X axis will represent the K values – ranging from 1 to 20 and the Y axis will show the accuracy in percentage.

\*\* upload your code to your github repo before 13th March.

# **Task 2 (Group):**

Report writing on Activation functions. You will be submitting a pdf file as like a paper with the followings:

1. Abstract
2. Introduction
3. Literature Review
4. Discussion
5. Conclusion
6. Contribution (need to mention each authors contribution)
7. References

\*\* Any one member from the group can submit this file. Need to upload it to MS teams. An assignment link named “Mid\_Report” is already provided. The deadline is till 13th March.