The first term project is related to convolutional neural networks (CNNs) and variety of these networks such as VGG, Resnet, Inception, DenseNet architectures. The datasets that will be worked on are given below (The list will be updated):

- A leaf images dataset for Bangladeshi medicinal plants identification [1], [2]
- Gastrointestinal images dataset for disease classification [3], [4]

Initially, apply a CNN architecture that is developed by you to get acceptable accuracy values. Additionally, apply at least two more CNN-based deep learning models as expressed above and compare the accuracy values of all of these networks in a table. Draw also a table of precision, recall, F1 results of each class for each solution. Represent the confusion matrix, training/validation loss and training/validation accuracy values. Show the validation and test results by commenting on them. When representing all of the tables and figures, please follow the scheme in [3].
You can use the source codes and have an idea about the phases of developing a CNN-based model from [5], [6].

[1] https://www.sciencedirect.com/science/article/pii/S2352340923005887
[2] https://data.mendeley.com/datasets/gk5x6k8xr5/1
[3] https://ieeexplore.ieee.org/document/10041447
[4] https://datasets.simula.no/kvasir/
[5] https://www.kaggle.com/code/ziadabdelaziz/surface-crack-detection-cnn
[6] https://www.kaggle.com/code/paulopinheiro/surface-crack-detection-100-accuracy