AI511 MACHINE LEARNING 2022
ASSIGNMENT 2

SUBMISSION DEADLINE – 5 pm, 15th December 2022

Given are 2 tasks:

1. The first task is to make a neural network using Numpy (and some helpers for preprocessing and cross-validation) to solve the classification problem of the given dataset. The dataset has 10 classes. The dataset is at
   https://www.kaggle.com/datasets/aniruddhkb/assignment2task1dset/
   For a good solution, your code needs to work without any runtime errors and needs to deliver a test accuracy of at least **95**%. There WILL BE partial marking given, depending on how far along you are in the solution. However, any attempts at dishonesty or plagiarism will be viewed harshly (and this time, we're using an auto-checker, so don't bother asking your friends in other TA cohorts).
   There are instructions given in the sample code. You are supposed to use the sample code as your base and follow the format given there, verbatim.

2. The second task is to make a neural network using PyTorch and solve the problem of the given dataset. The dataset has 10 classes. The dataset is at
   https://www.kaggle.com/datasets/aniruddhkb/assignment2task2/
   Here, no partial marking will be given. Your code needs to work without any runtime errors, and a test accuracy of at least **57**% is desired. However, any attempts at dishonesty or plagiarism will be viewed harshly (and this time, we're using an autochecker, so don't bother asking your friends in other TA cohorts).
   There are instructions given in the sample code. You are supposed to use the sample code as your base and follow the format given there, verbatim.