**Assignment 1:**

**Discussion:**

#first needed libraries were imported, like os, random,cv2,tqdm,numpy,matplotlib.pyplot.

#categories were shown

#then the training dictionary was created and the categories were added to it.

#then the train data was created and the images were added.

#then the data was shuffled and the first 50 images were displayed.

#then the data was split into train and test data.

#then the knn function was created and the nearest neighbors were found.

#then the accuracy was calculated.

#then the accuracy was plotted.

**Assignment 2:**

**Discussion:**

#first libraries were imported and then the x values were defined

#then the functions were defined and the graphs were plotted

#the graphs were plotted using the plot\_graph function