Assignment 1

1. How does the choice of the number of neighbors (K) affect the performance of the KNN classifier?

2. What are the advantages and disadvantages of using KNN for image classification?

3. Programming assignment:

Implement a KNN image classifier in Python. You can use the CIFAR-10 dataset to train and evaluate your classifier.

    a. Use you own implementation for KNN training and prediction.

    b. Use the function from scikit library and report your results on the validation dataset for different parameters.

	L1 distance	L2 distance
K = 1		
K = 3		
K = 5		

    c. Report your score on the test dataset using your best model.