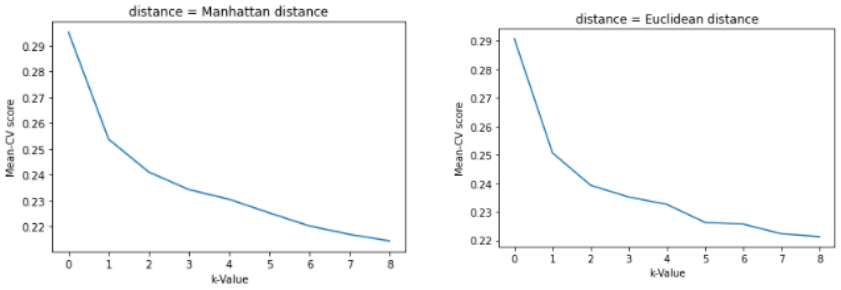
1.1 Conclusion

We have seen working of the three popular algorithms in the field of classification, three algorithms have its own way of processing and training the model. to conclude which algorithm out of those three works best for our Greek character recognition, we decide based on how accurate each model is while testing on test data set. The algorithm which provides us the best accuracy on test data is the best model that we got from our experiment to classify Greek Characters. when it comes to dataset, each algorithm is set at the same level of training, validation and testing datasets, the following table shows the accuracy of each algorithm on testing data,

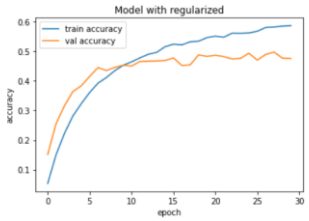
Algorithm	Test Accuracy
KNN	32.6%
NN	47.7%
CNN	97.3%

This experiment helps us to conclude very clearly that using CNN network to classify the Greek character gives us the superior result to using the Kaggle dataset. For visual representation on how these algorithm works on training and validation dataset, the following graph are shown below,
For KNN algorithm there is no training, so for KNN, the graph between hyperparameter and validation accuracy is shown,

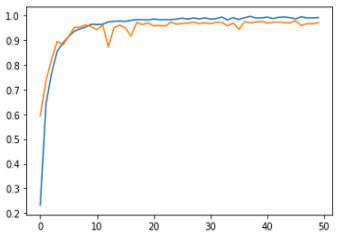
KNN -



NN -



CNN -



X - axis: epoch (range from 0 to 50)
Y – axis: Accuracy
Blue-Curve: Training accuracy
Orange-Curve: Validation accuracy