ABSTRACT

Occur a problem when a handwritten inputed in to computer. It's often found in banks and post offices. At the bank customers who make transactions usually write on a piece of paper. Bank Teller will retype into computer. At the post office costumer who will send a letter, will fill a form using handwriting. Then a staff member will retype the data on computers. To speed up things like above required automation system.

Diagonal Based Feature Extraction is a method for feature extraction that divides the pixel size of the image-pixels to become smaller and equally. A feature extracted from each of the pixel zone by moving diagonally. Each zone will have some diagonal lines and pixels foreground.

The method used to classify is k-NN or often called k-Nearest Neighbour. At the training data will be taken more than one nearest neighbour with test data that will then be used to determie k-NN class.

With Diagonal feature Extraction and k-NN classification using k=2 from left obtained highest accuration, 90% from capital word testing.

Keyword : *Diagonal Feature Extraction*, Pengenalan Tulisan Tangan, *Handwritten Recognition, k-Nearest Neighbour, k-NN*