Assignment 2

# Additional Notes

1 side code introduction

explain high level structure of the code.

Hard copy of code

Make sure it is readable.

Print in grayscale

Good font

Remove debug print statements.

Report of results

Techniques used

Note deviations from recommended steps

Report the final percent correct for each of the experiments

Report results for \*both\* test pages i.e. test1 and test2

Report results in tables, no need to plot them or to use charts

Report extra results to demonstrate working code

Optimizing feature selection e.g. dealing with brightness levels, dimensionality reduction

Classifier makes mistakes so don’t make the searcher find exact words all the time.

numpy GUI in Windows: in the .py file make it save the plots as .png instead of display them.

Searcher

Due to errors in classifier, the searcher should not only regard exact matches for labels horizontally, vertically and diagonal

y in the classified matrix.

First transform the classified matrix into horizontal, vertical or diagonal arrangements and order it into a 1 dimensional array (zip it with a list of tuples representing coordinates), for a given word there is a “kernel” of the same length that goes through the 1 dimensional array 1 index at a time until there’s no space. At each index store the fraction of labels that match exactly with the word when its letters are converted into the label numbers. The associated tuple at that index is the starting coordinate for the yellow line and together with the length of the word, we get the ending coordinate for the yellow line.