Recovery

· recoverExpression.m

This is the complete function for the recovery part. It can be called in this way:

latexStr = recoverExpression(result);

where the input and output is specified as follows:

% input: result - a struct with 3 areas

% .bounding (just as from the segmentation result)

% .data (not needed, but it is okay to be provided)

% .label (a number between 1 ~ 60)

% output: latexStr - the LaTeX expression of the equation

· recover\_test.m

This is the test code for the recoverExpression function

Because I didn’t have the label result from the recognition part, I create a labelHelper function in this test code, which will be useless when combined with the recognition part

Other auxiliary functions:

· distinguishLine.m - to distinguish ‘line’(38) into ·, - or ——

· mapLabel2Char.m - map labels(1 ~ 60) to characters. I DON’T HAVE A COPY OF THE LABEL SHEET, SO THIS FUNCTION NEEDS TO BE COMPLETED

· recover.m - a recursive function to combine latex strings for different parts together

· recoverText.m - a function that generate a latex string for a line of characters including super/sub-scripts excluding fraction, sqrt, sigma and integral

· verticalCentroid.m - a function that helps to detect the super/sub-script

· group.m - segment the whole equation to different part so that it will be easier to handle each part separately

· (labelHelper.m) - OBSOLETE PROVIDED WITH RESULTS FROM THE RECOGNITION PART