Idea on digit recognition

1. Preprocess image
2. Detected only three symbols : dimension line, cut line and X symbol
   1. Calculate Aspect ratio
   2. Do the feature rules
      1. to compute the aspect ratio, the extent and the solidity
   3. Classify shape according to Aspect ratio
   4. Identify the symbols
3. Then detect the last symbol
   1. Extract only the last symbol
   2. Do cropping, resizing
   3. Save the cropped digit image in local
4. Run MNIST algorithm.
5. Load data from MNIST
6. Build the CNN model
7. Training model
8. Test the model, and evaluate it.
9. Classify the digit, one by one
10. Separate digits to single ones.
11. Taking usage of the pre trained model to classify the digits that will get a list of single numbers. (eg. a list like: [4,0,0])
12. Construct the number from the list of single digits.

References:

1. Calculating aspect ratio
   1. <https://opencv-python-tutroals.readthedocs.io/en/latest/py_tutorials/py_imgproc/py_contours/py_contour_features/py_contour_features.html#b-rotated-rectangle>
2. Advance Contour properties
   1. <https://gurus.pyimagesearch.com/lesson-sample-advanced-contour-properties/>
3. Measuring the size of an object (or objects)
   1. https://www.pyimagesearch.com/2016/03/28/measuring-size-of-objects-in-an-image-with-opencv/