# Homework 3 C

## Due: November 7, 2019, 11:59 PM EST

## Question 1 - 25 points

For this assignment you will be creating data for Project01. You are to **hand-write** the letters 'a','b','c','d','h','i','j', and 'k' **ten times each**. Use lowercase print lettering. You should write these letters on clean, white printer paper. It is preferred that you use a regular black Sharpie.

After writing the letters, you are to crop the images (this can either be done on your phone or computer). Try to center and focus the numbers as much as possible. (Please refer to the sample provided).
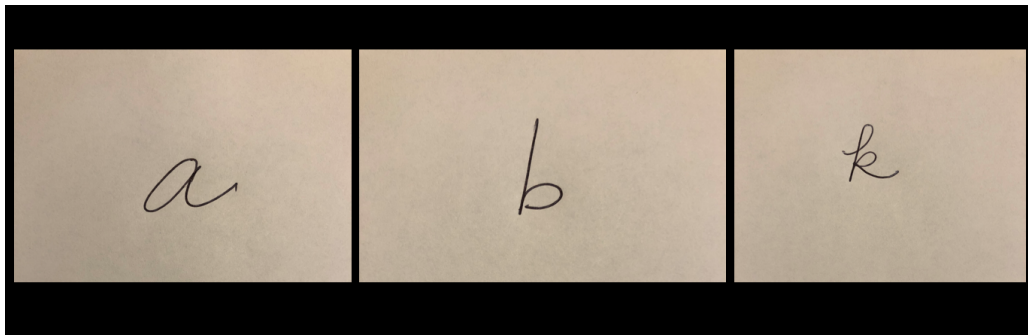


Figure 1: Acceptable image examples

You can then run the provided code, *hw03.py*, to generate binary images. Combine all data into a ndarray object and name it "data.npy". Also provide an array of labels called "labels.npy". As specified in Project01, labels for 'a','b','c','d','h','i','j', and 'k' should correspond to 1,2,3,4,5,6,7, and 8, respectively.
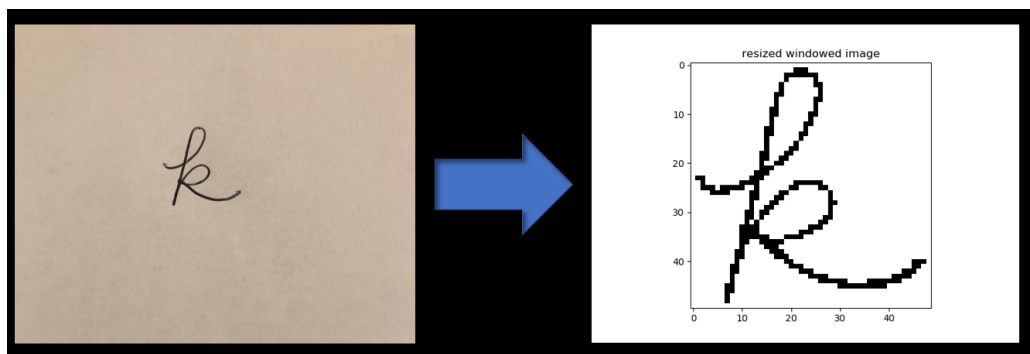
Figure 2: Digitized image of a hand-written "K"

**To receive full credit** for assignment 03C you should push your full directory of images, your binary image object and label vector. These files must be **named and formatted correctly for full credit.** Please ensure the data is properly pushed to the repository.