For this MATLAB demo, I will be demonstrating the anprGUI.m function, which is a GUI that can read in an input image of a license plate and return the plate number in the MATLAB command window.

First I will load the plate into the system, the first plate is named demo1.jpg. It is a pretty standard license plate and the system should have no trouble recognizing it. So as you can see, the system has successfully extracted all the characters one by one, here we have the original plate, then the binary version of the plate, and last but not least, the MATLAB command window returns the plate number where we can compare to the original input.

Now I do want to run through one more example. This time we have a motion blurred license plate, the system is unable to extract the characters. In fact, the ANPR system I implemented was unable to distinguish the license plate from the original image because the entire car is being recognized as one object under the current implementation.

And here you can see that the system is unable to return the plate number.

So overall, it is not a perfect system by any mean, I know there are implementations out there that do take motion blur into consideration, but it involve a more complex approach and if given more time, I'd love to take a shot at it.