

Test

November 5, 2020

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[7]: import pandas as pd
import numpy as np
import tensorflow as tf
from tensorflow.keras.models import load_model
from segmentImg import segmentGivenImage
import matplotlib.pyplot as plt
import cv2
import os
import glob

[9]: def predictImage(modelName, imagePath):
    model = load_model(modelName)
    input_map = dict()
    c = 'a'
    for i in range(26):
        input_map[i] = c
        c = chr(ord(c)+1)

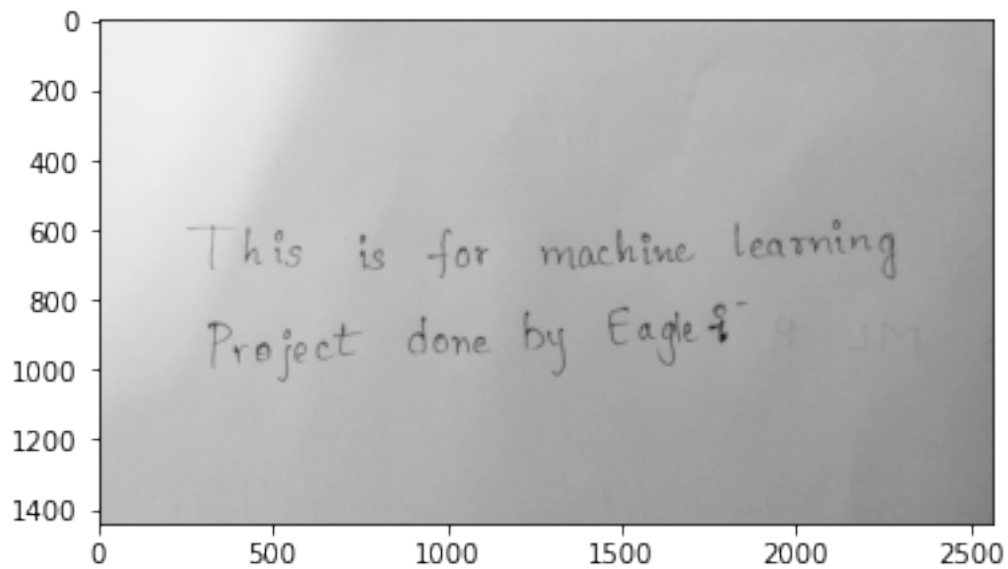
    path = imagePath
    segmentGivenImage(path)

    folder = 'segmented_img/img1'
    images = []
    for filename in sorted(os.listdir(folder)):
        img = cv2.imread(os.path.join(folder, filename), 0)
        if img is not None:
            img = 255 - img
            img = img.astype('float32')
            img /= 255
            pred = model.predict(img.reshape(1, 28, 28, 1))
            plt.figure()
            plt.imshow(img, cmap='Greys')
            plt.show()
            print("Prediction ", input_map[pred.argmax()])
            print()
    files = glob.glob(folder+'/*')
    for f in files:
```

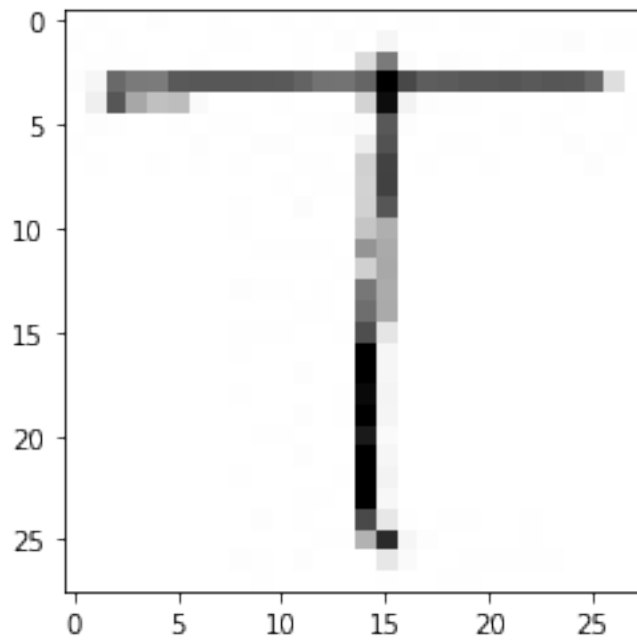
```
os.remove(f)
```

```
[10]: def inputImageViz(path):  
      img = cv2.imread(os.path.join(path),0)  
      img = 255 - img  
      plt.figure()  
      plt.imshow(img,cmap='Greys')  
      plt.show()
```

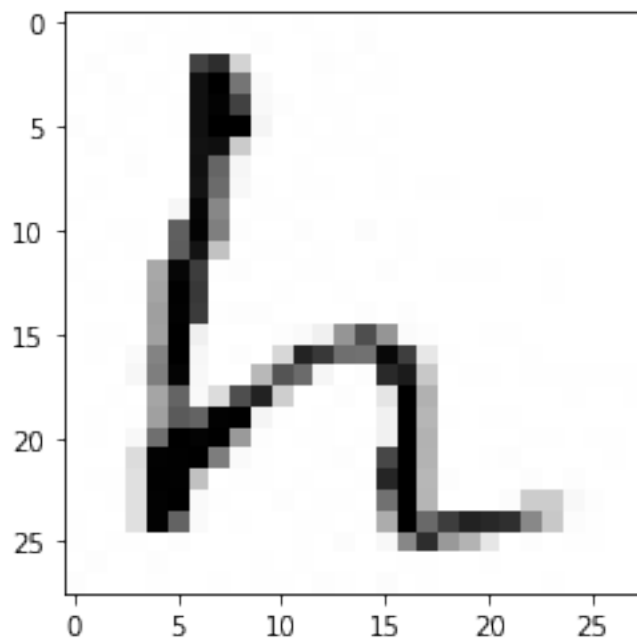
```
[17]: inputImageViz('img.jpg')
```



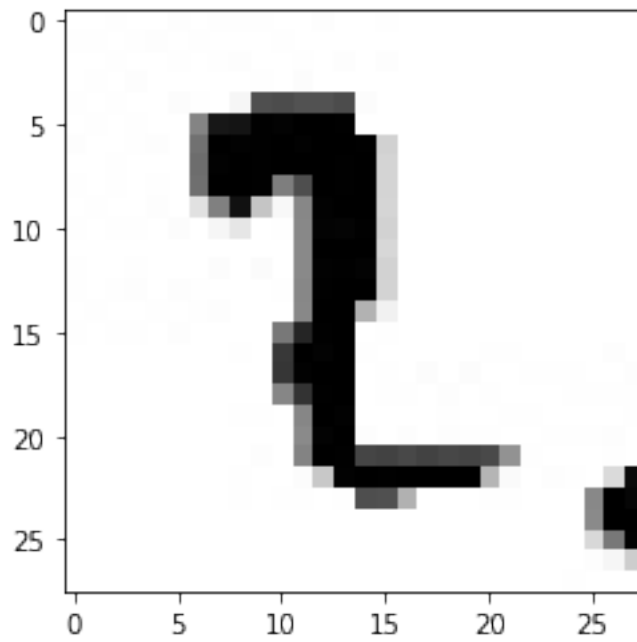
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[18]: predictImage('charRecognition2.h5','img.jpg')
```



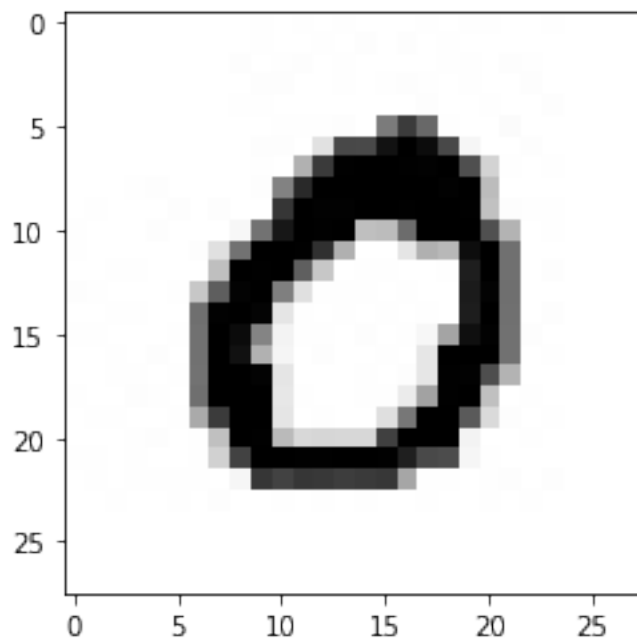
Prediction t



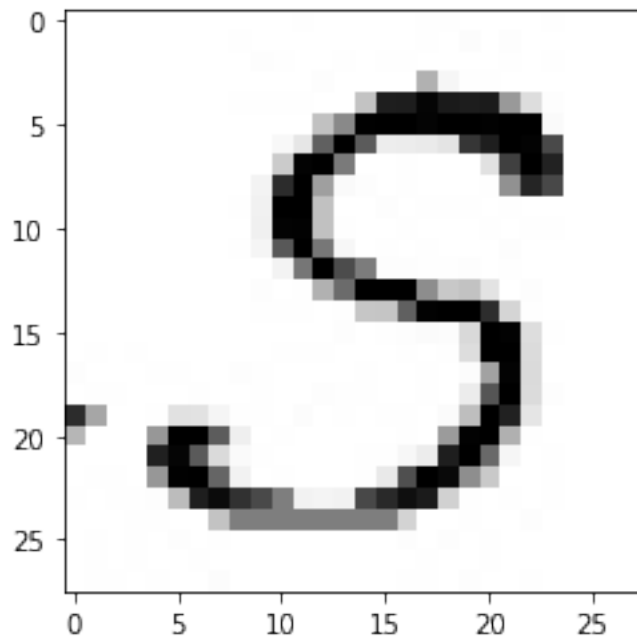
Prediction k



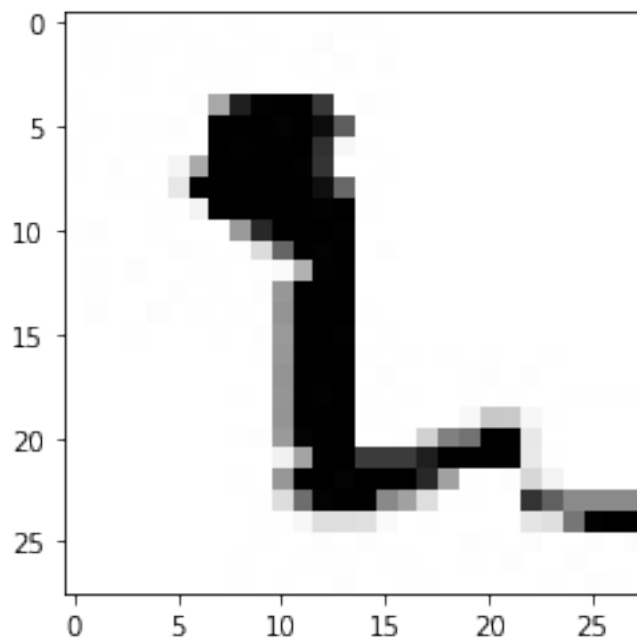
Prediction \hat{z}



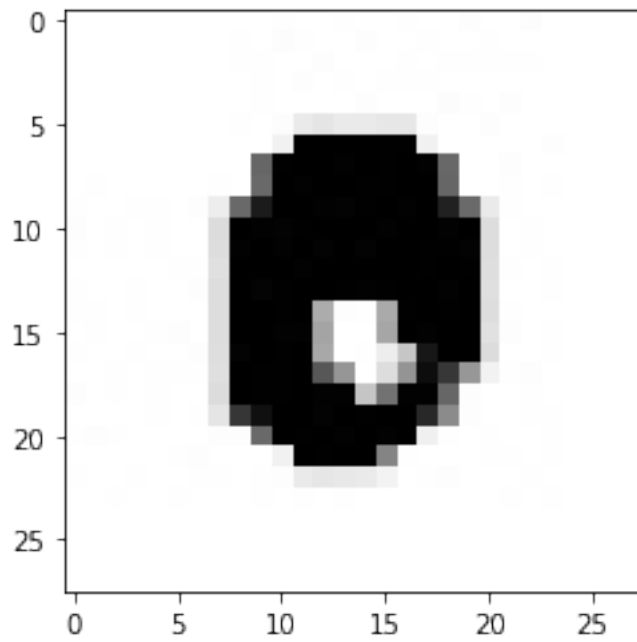
Prediction \hat{o}



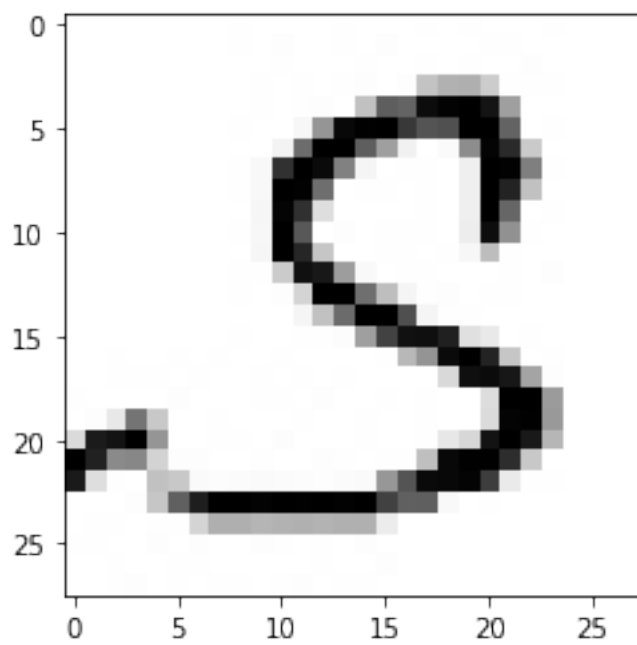
Prediction 5



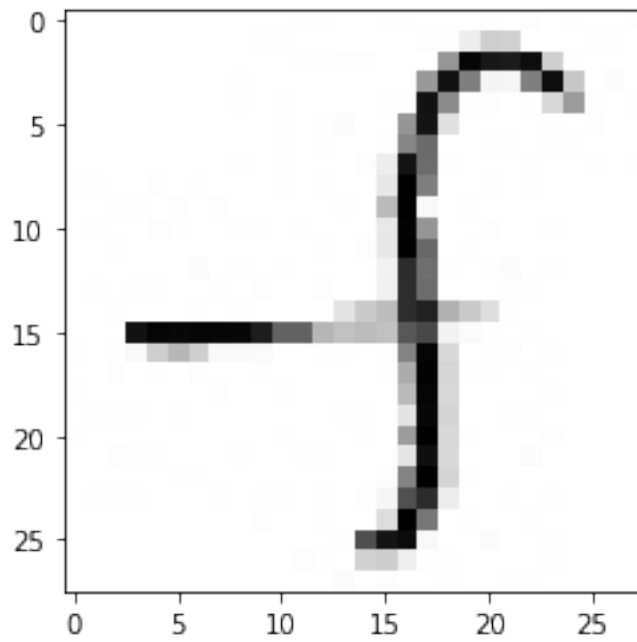
Prediction 1



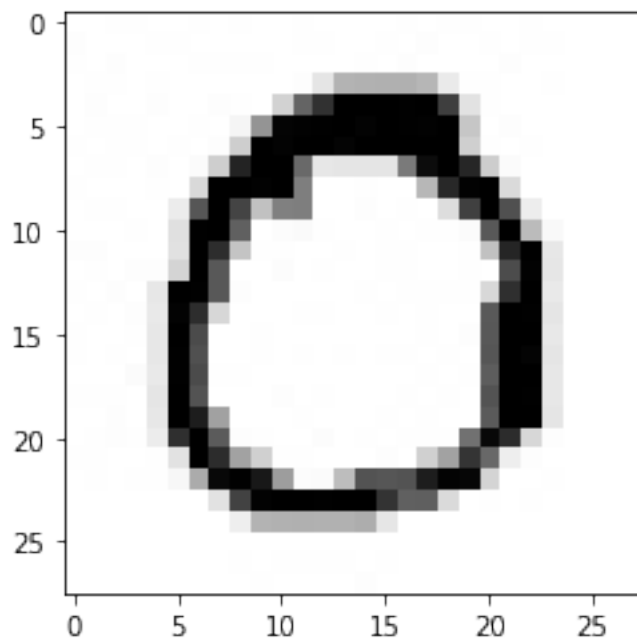
Prediction o



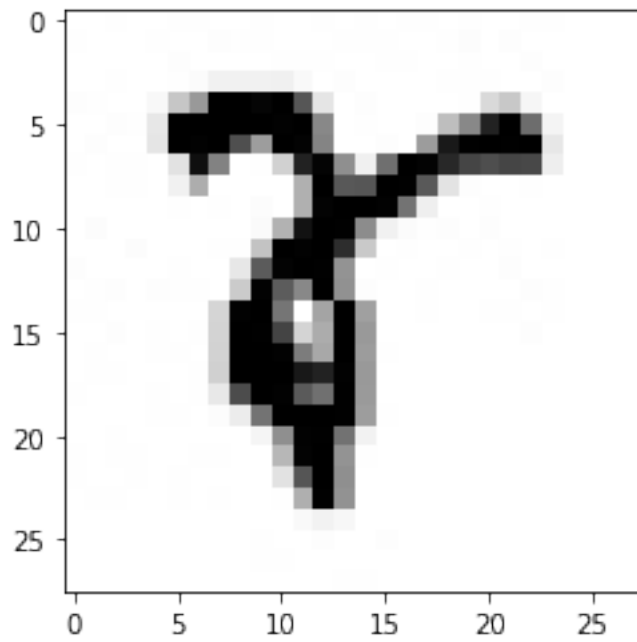
Prediction s



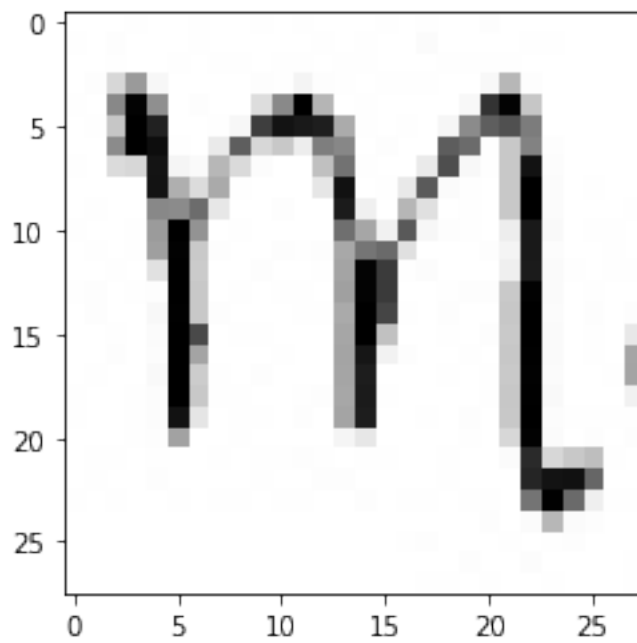
Prediction y



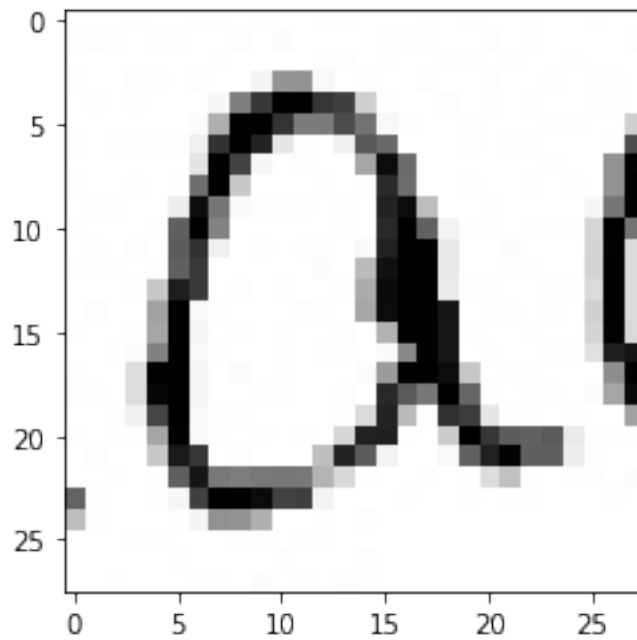
Prediction o



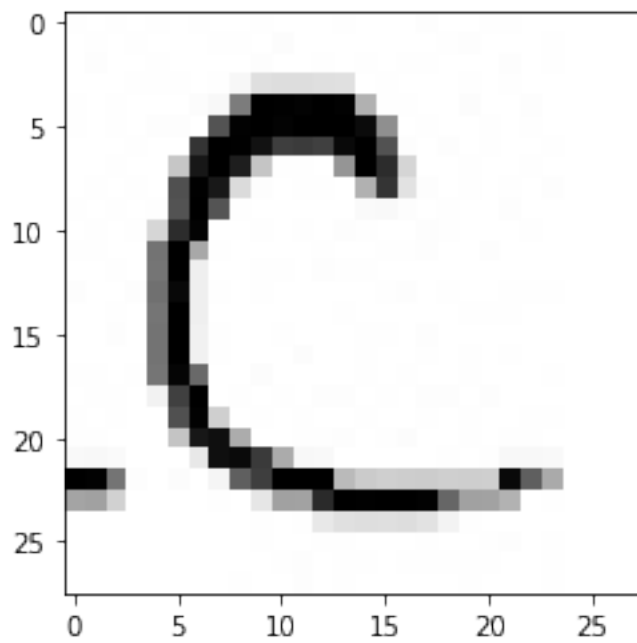
Prediction u



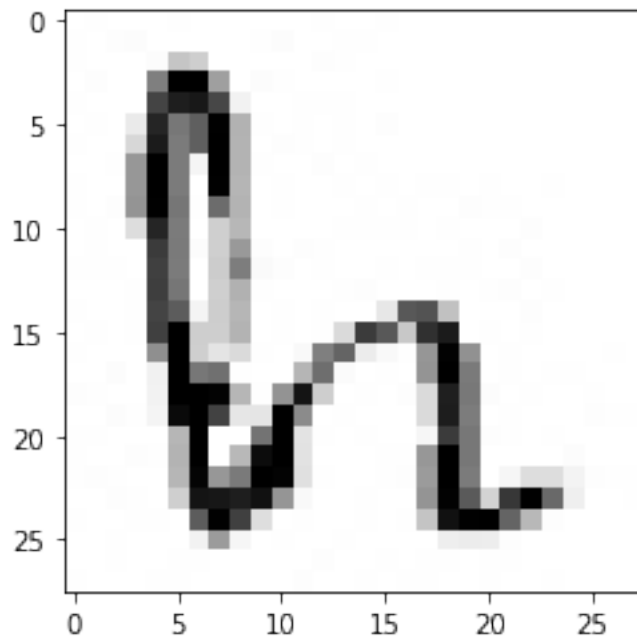
Prediction m



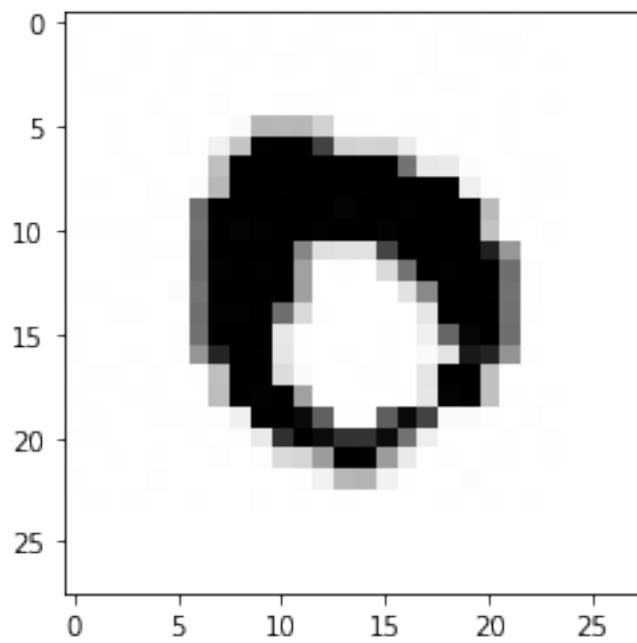
Prediction q



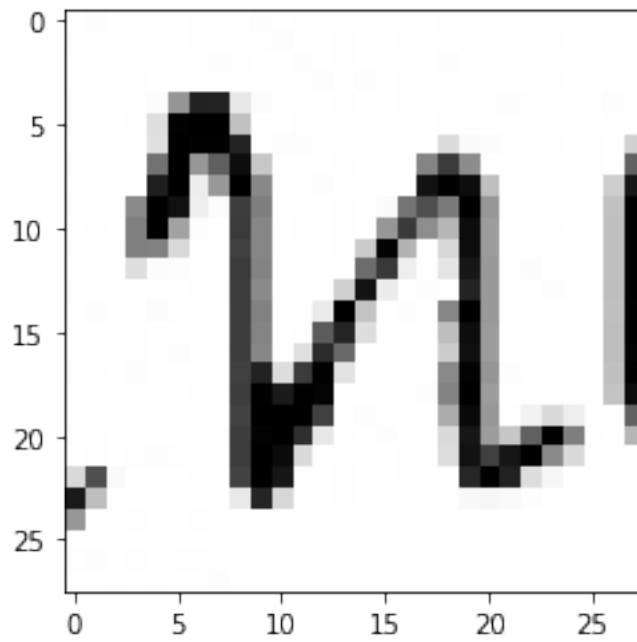
Prediction c



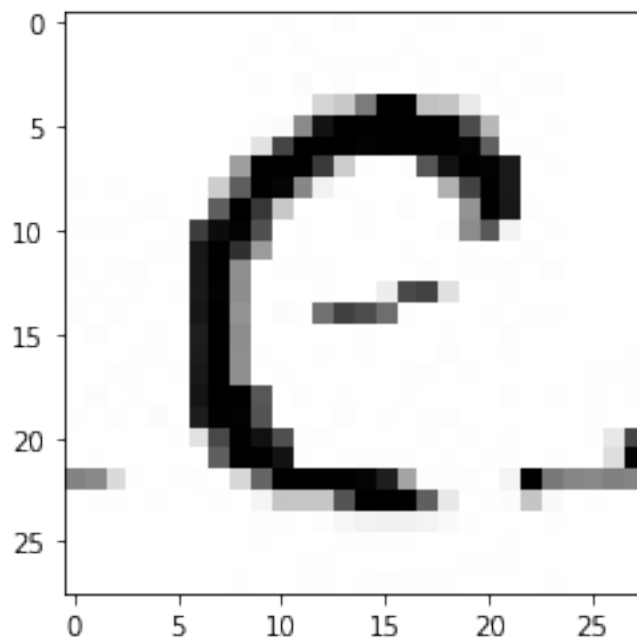
Prediction w



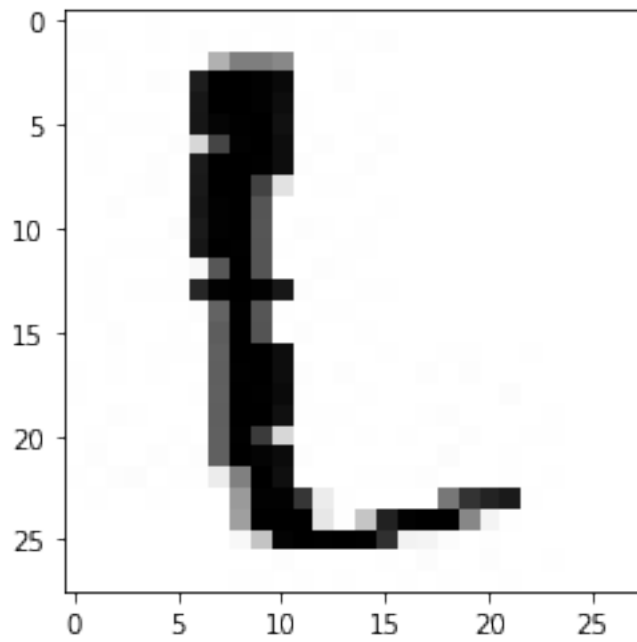
Prediction o



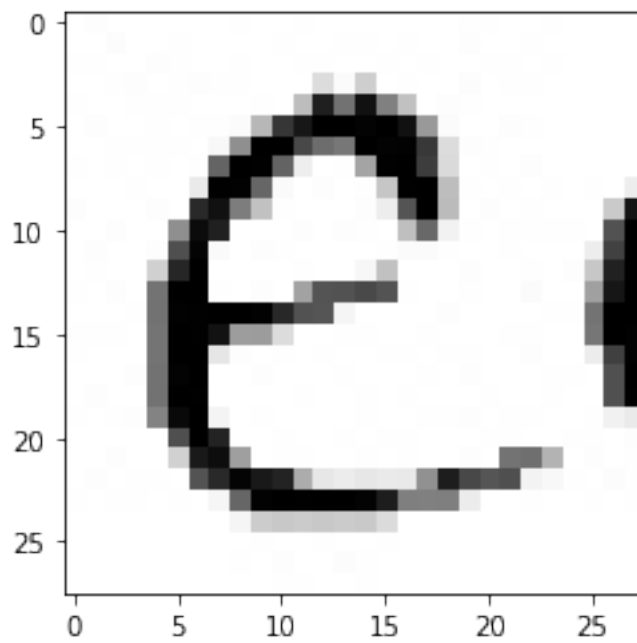
Prediction w



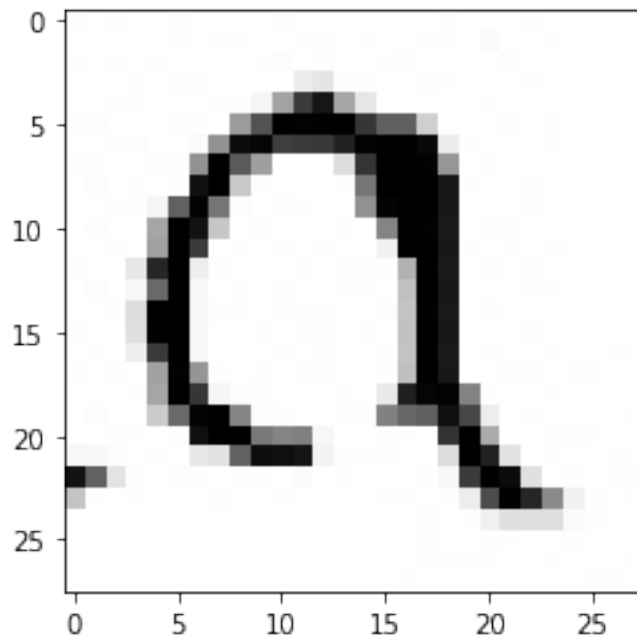
Prediction c



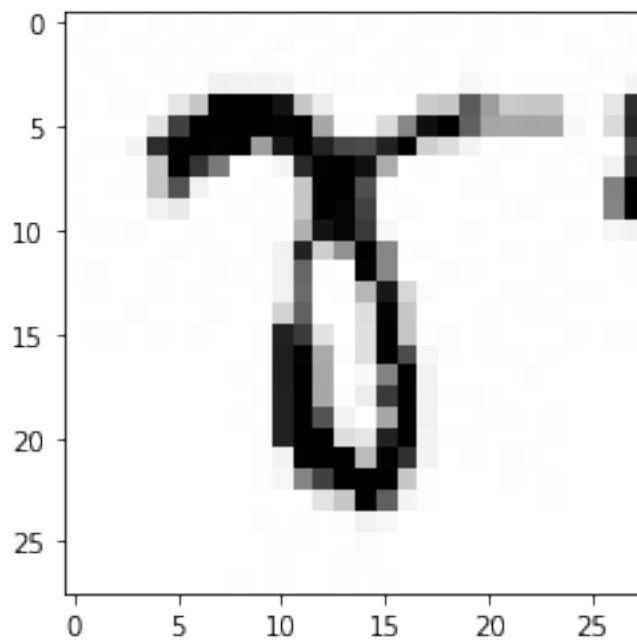
Prediction 1



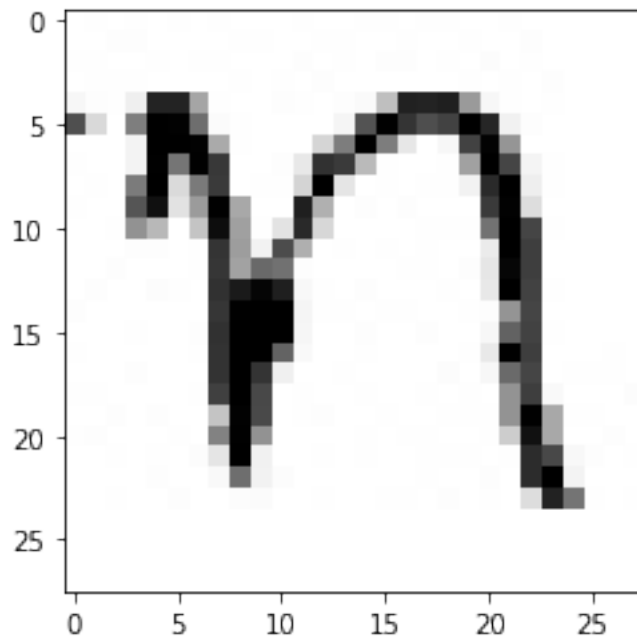
Prediction e



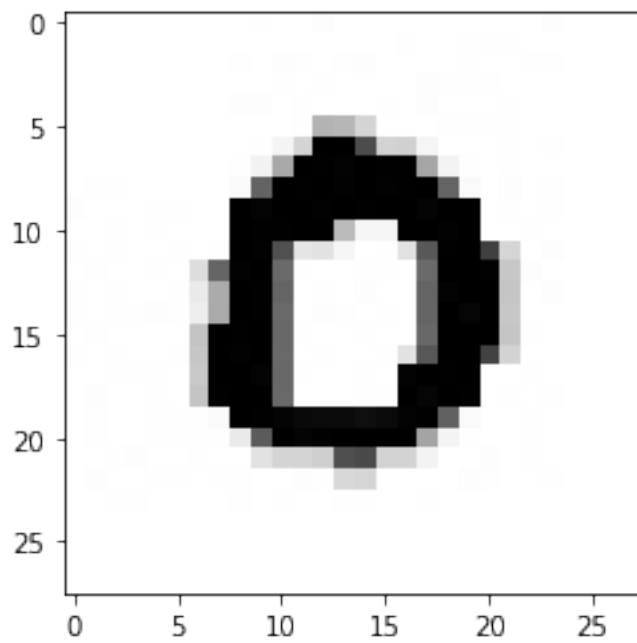
Prediction q



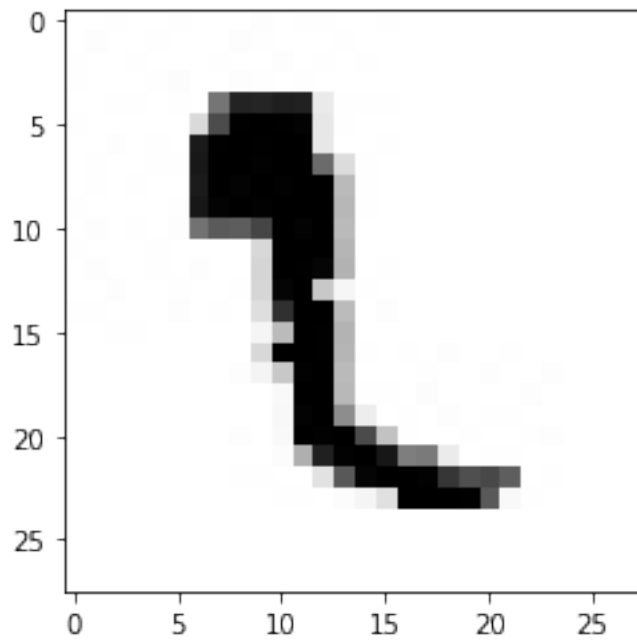
Prediction t



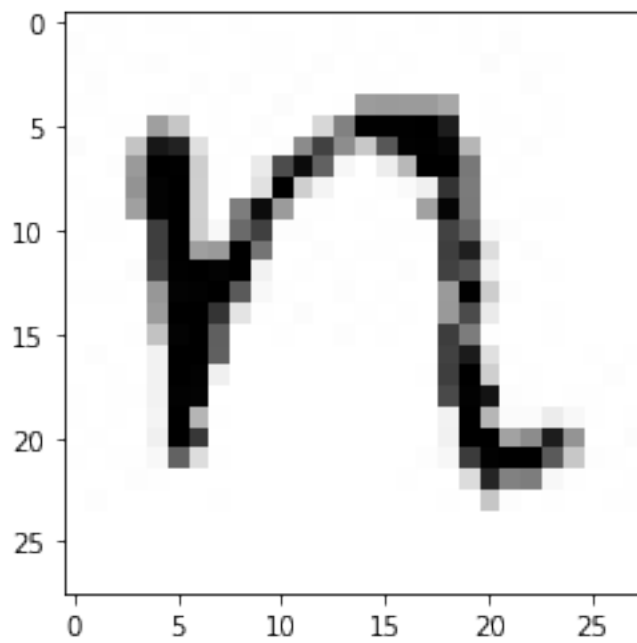
Prediction m



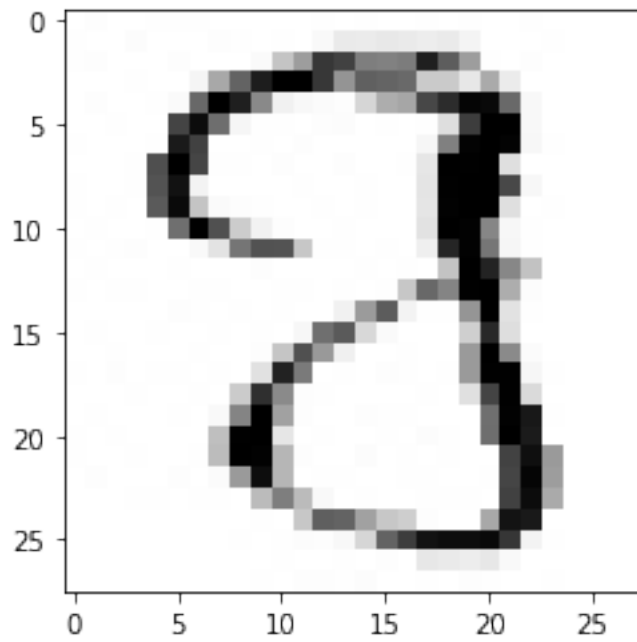
Prediction o



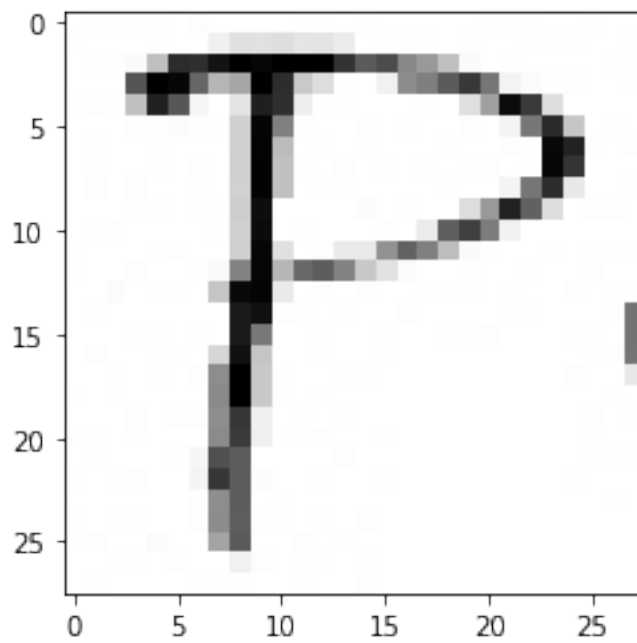
Prediction 1



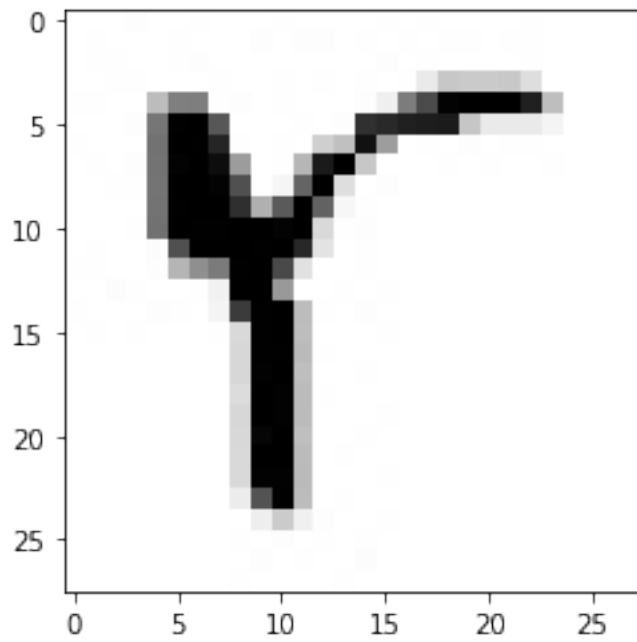
Prediction n



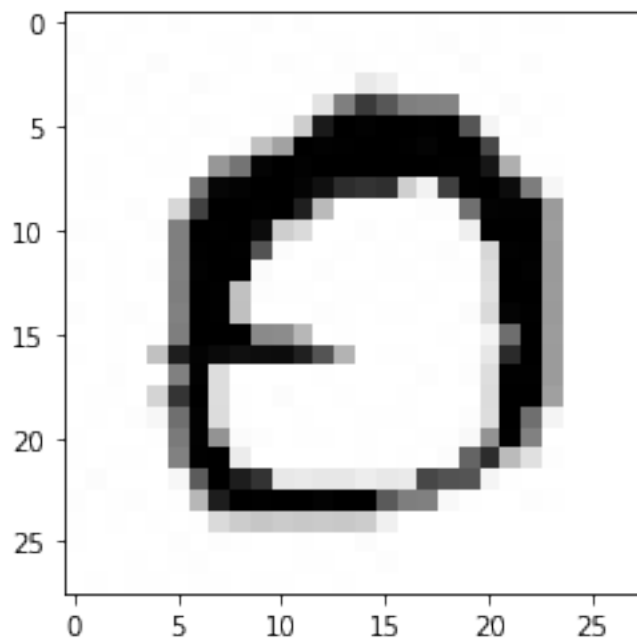
Prediction z



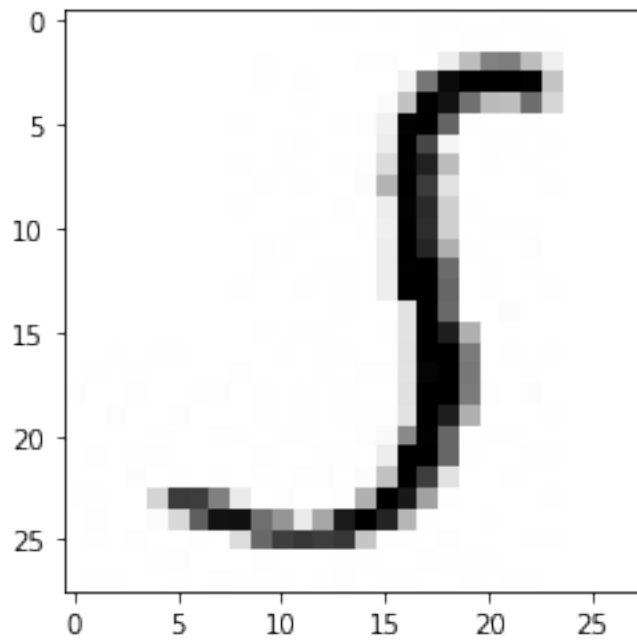
Prediction p



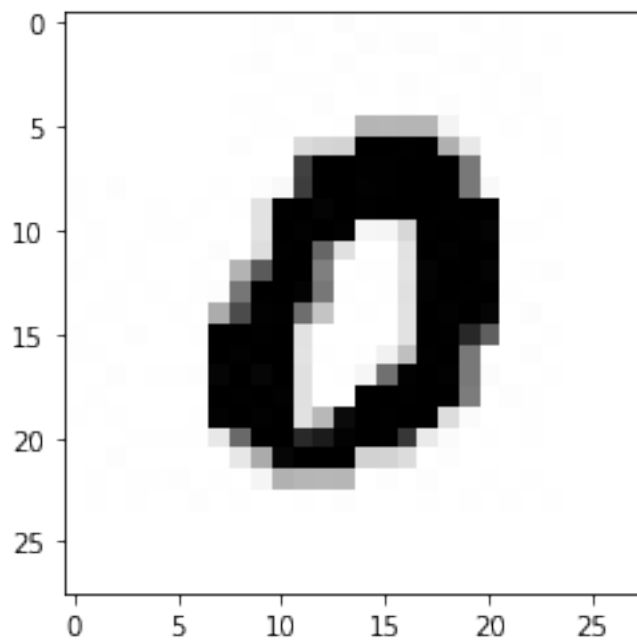
Prediction t



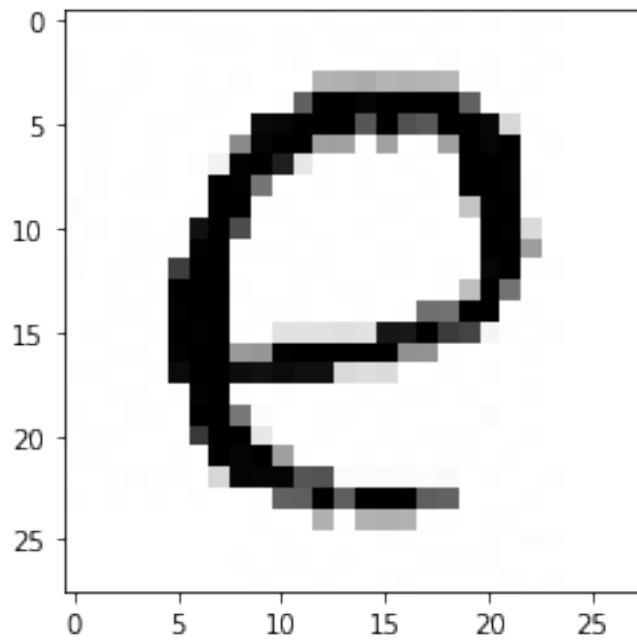
Prediction o



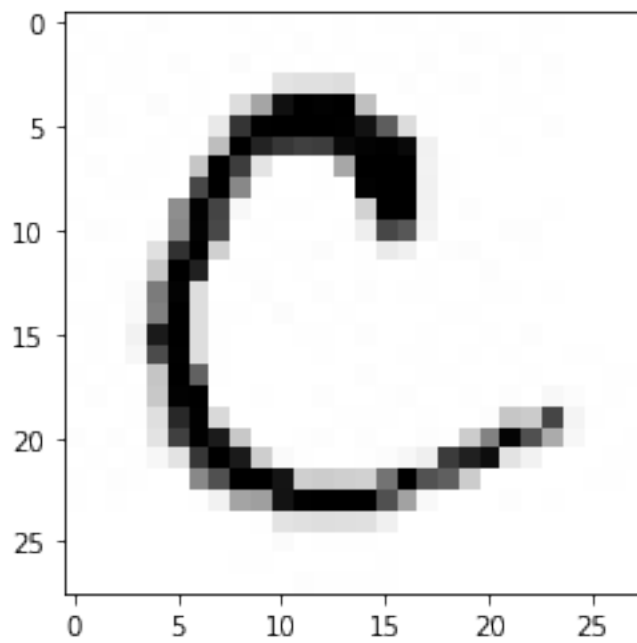
Prediction j



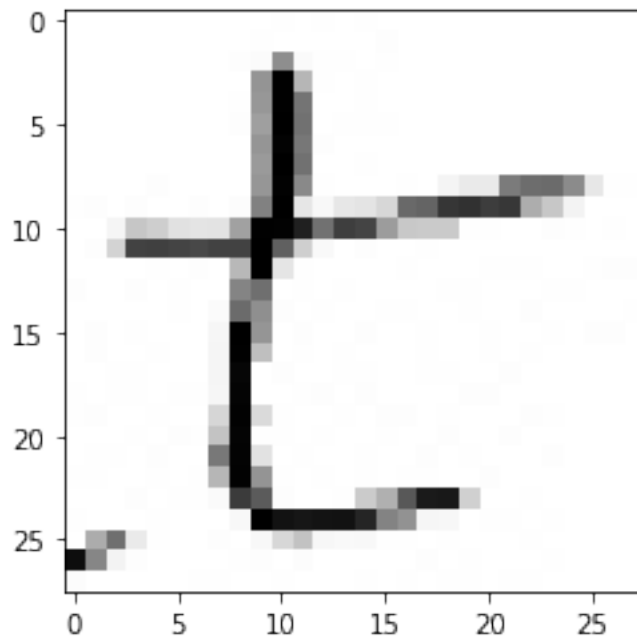
Prediction o



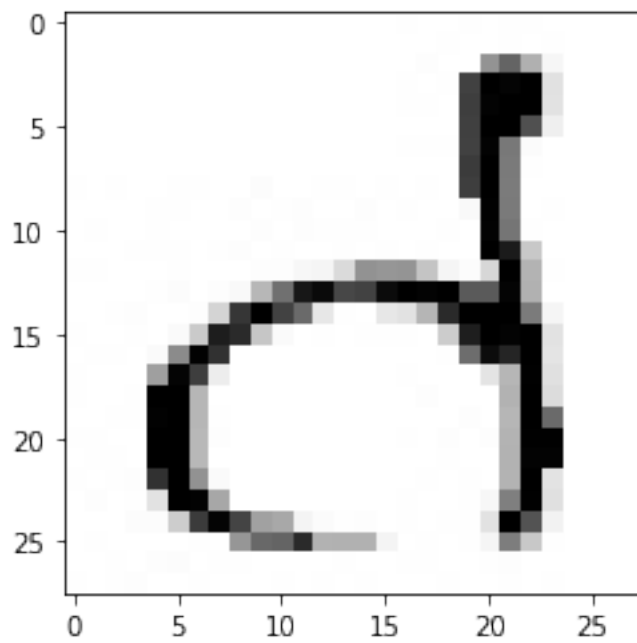
Prediction q



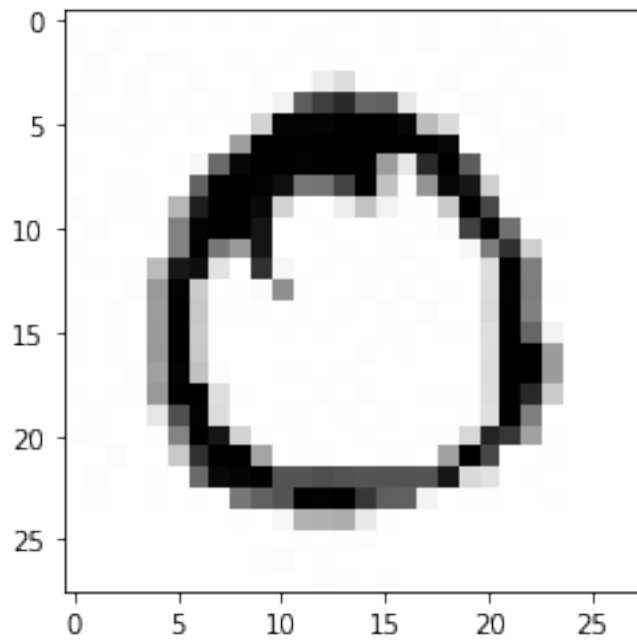
Prediction c



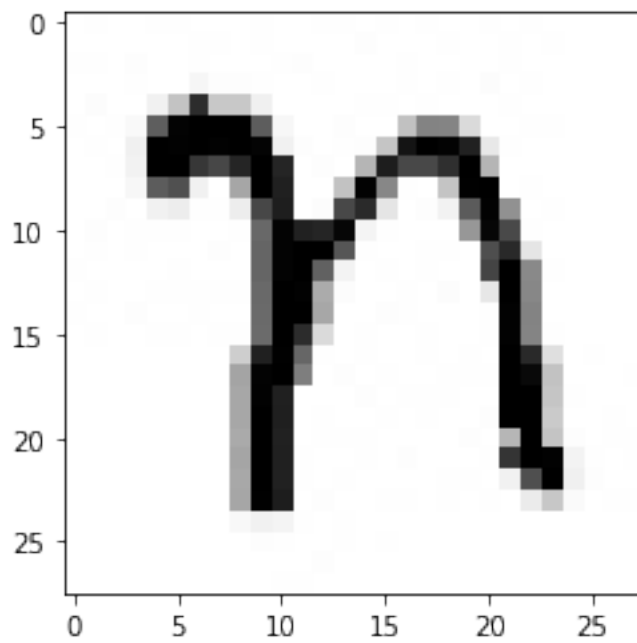
Prediction k



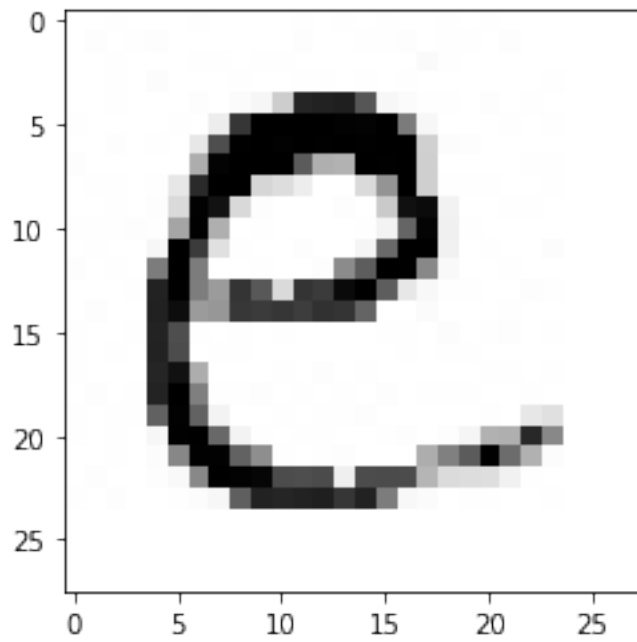
Prediction h



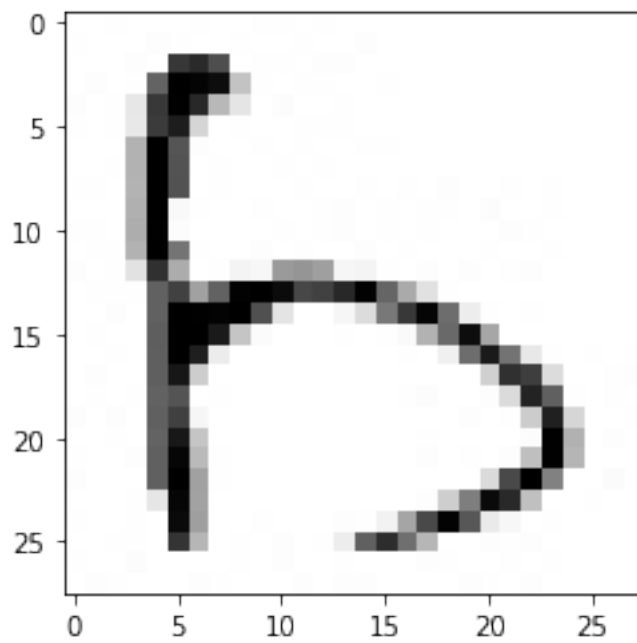
Prediction o



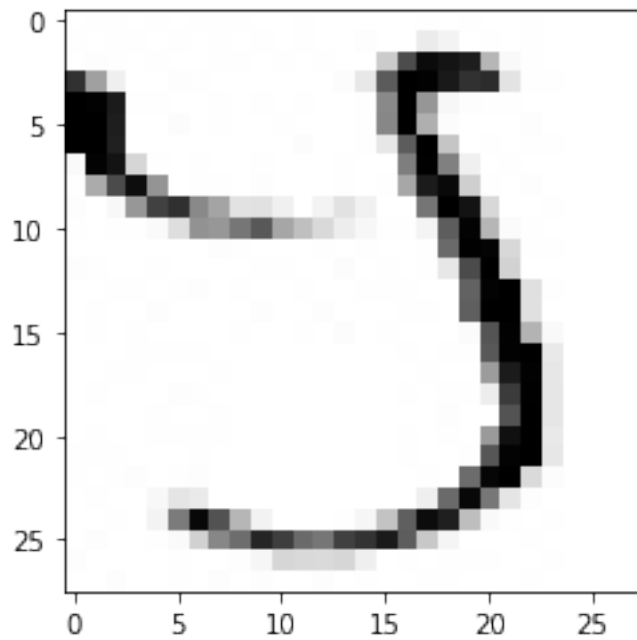
Prediction y



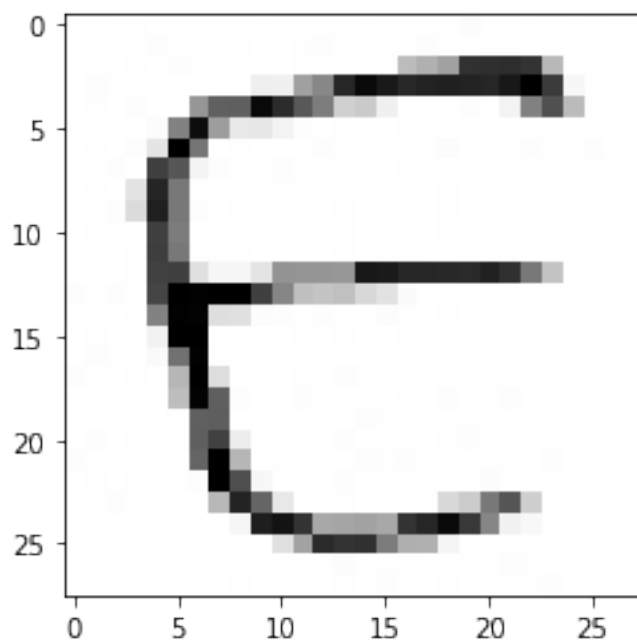
Prediction c



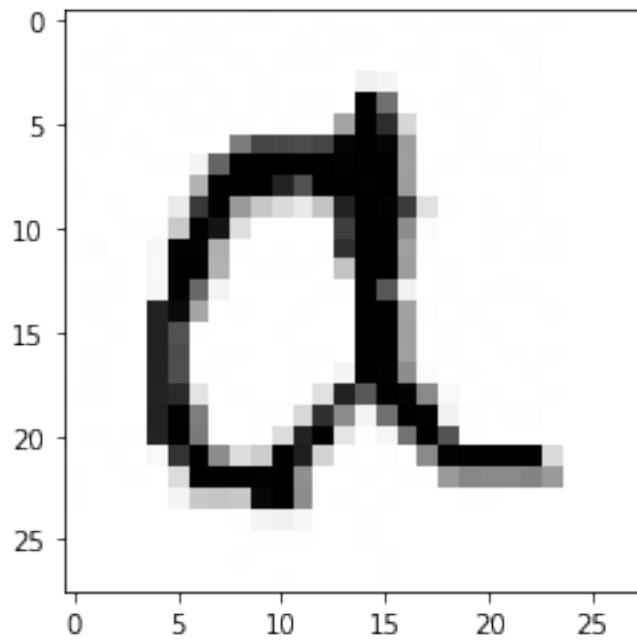
Prediction h



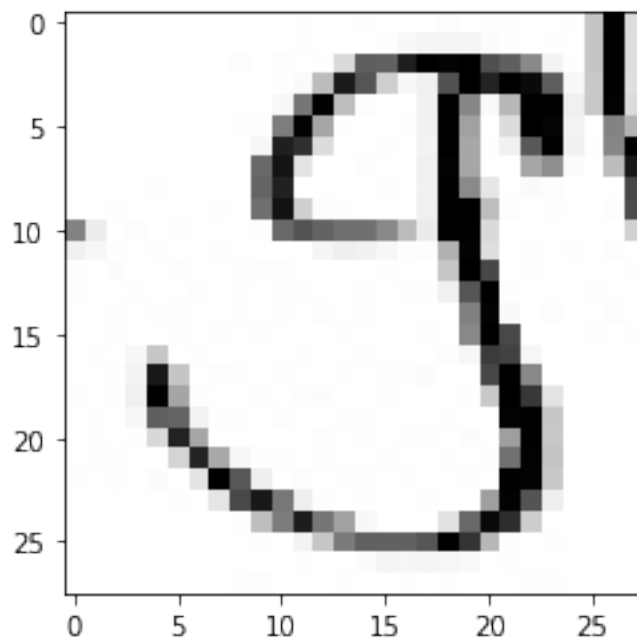
Prediction y



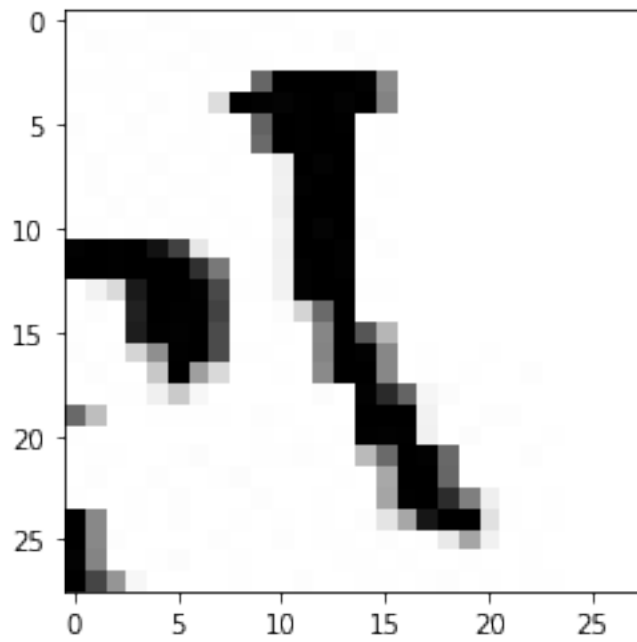
Prediction e



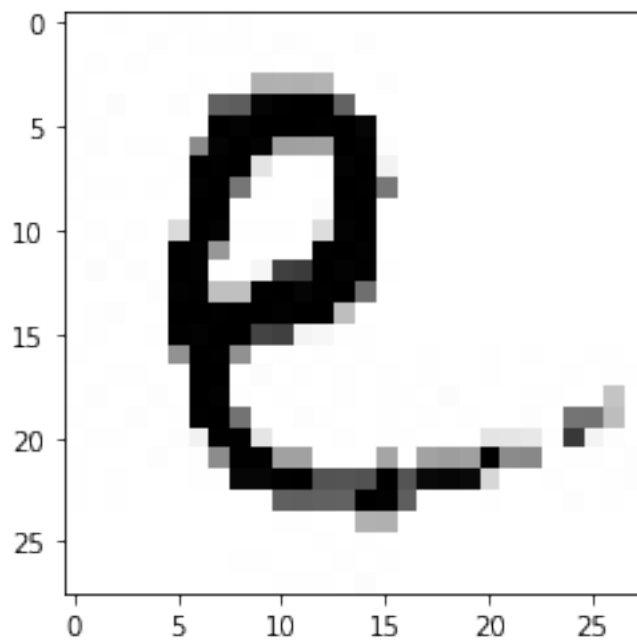
Prediction q



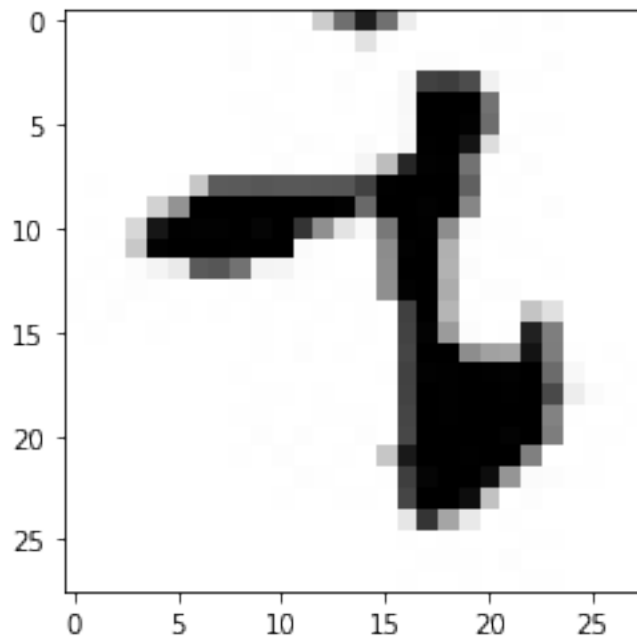
Prediction s



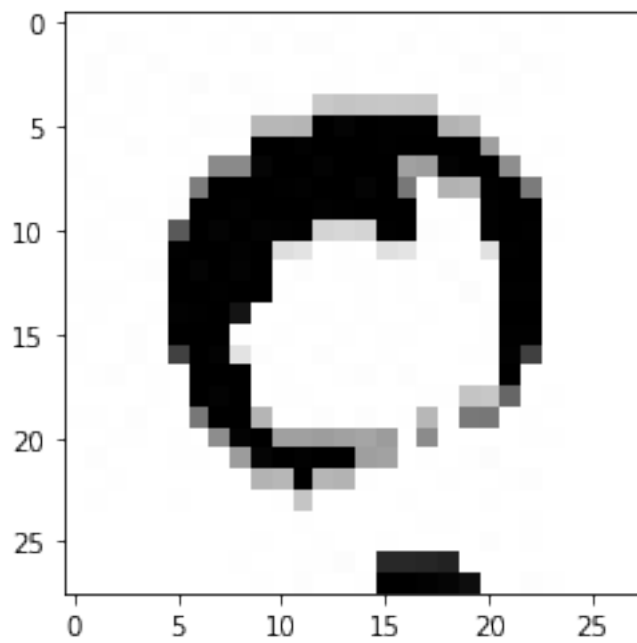
Prediction \hat{y}



Prediction \hat{e}



Prediction t



Prediction o

[]: