```python
import os
import cv2
import numpy as np
from keras.utils import to_categorical
import tensorflow as tf
from tensorflow.keras import layers
from sklearn.model_selection import train_test_split

#img and label
train_images=[]
train_labels=[]


#read the file
path="E://number"
for i in range(10):
    for file in os.listdir(path+"//"+str(i)):
        print(file)
        img=cv2.imread(path+"//"+str(i)+"//"+file)
        img = cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
        img = cv2.bitwise_not(img)
        img = cv2.resize(img, (28, 28))
        train_images.append(img)
        train_labels.append(i)


train_images=np.array(train_images)
train_labels=np.array(train_labels)
#we can use sklearn to Train/test split for any dataset
X_train, X_test, Y_train, Y_test = train_test_split(train_images,train_labels, test_size=0.20, random_state=33)

#x get the amount of image by unpacking
x,*other=train_images.shape
#preprocess
x_train=train_images.reshape((x,28*28))
x_train=x_train.astype('float32')/255
y_train=to_categorical(train_labels)

#train
model=tf.keras.Sequential()
model.add(layers.Dense(512,activation='relu',input_dim=784))
model.add(layers.Dense(10,activation='softmax'))
model.summary()
model.compile(optimizer='rmsprop',loss='categorical_crossentropy',metrics=['acc'])
history=model.fit(x_train,y_train,epochs=5,batch_size=10)
```