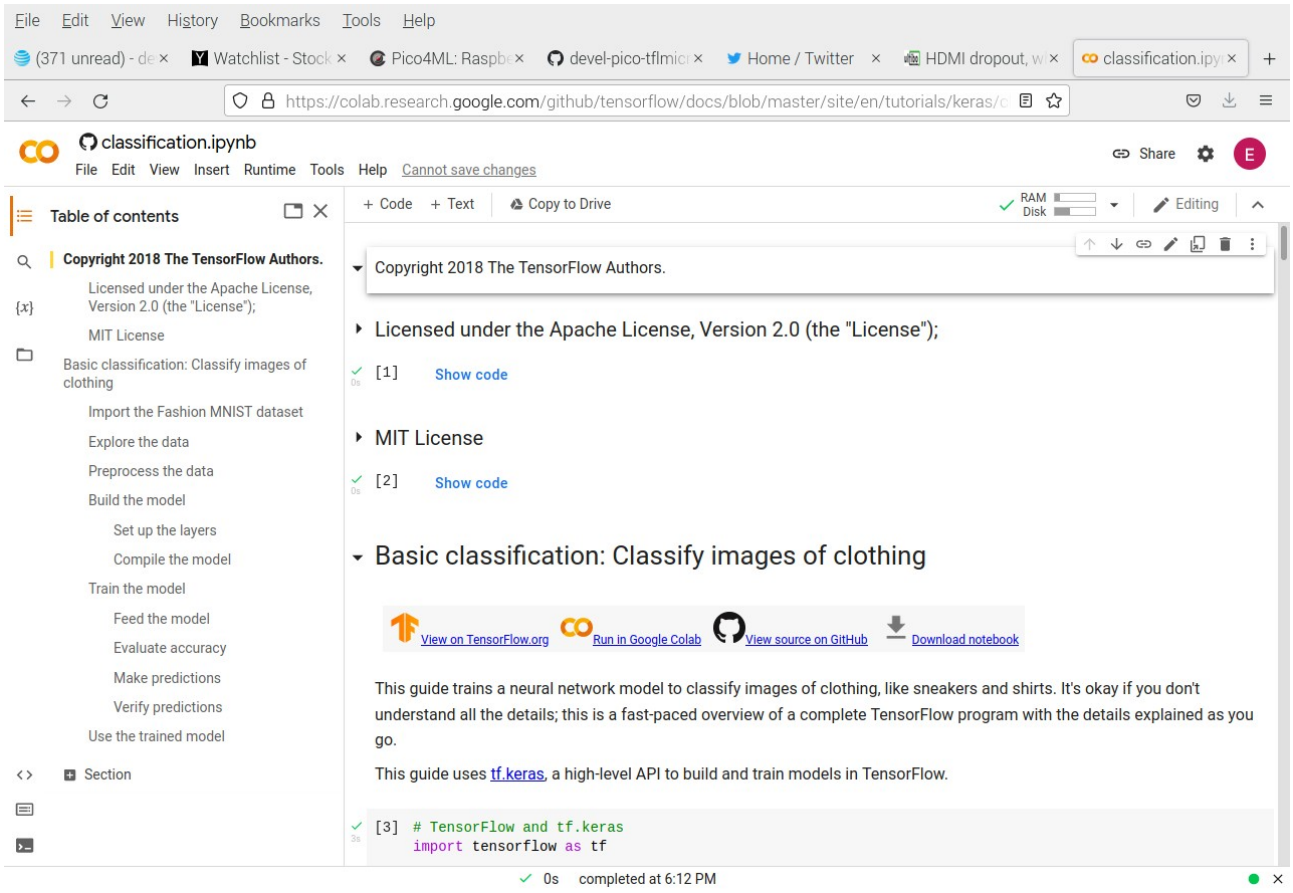
**********Default**********

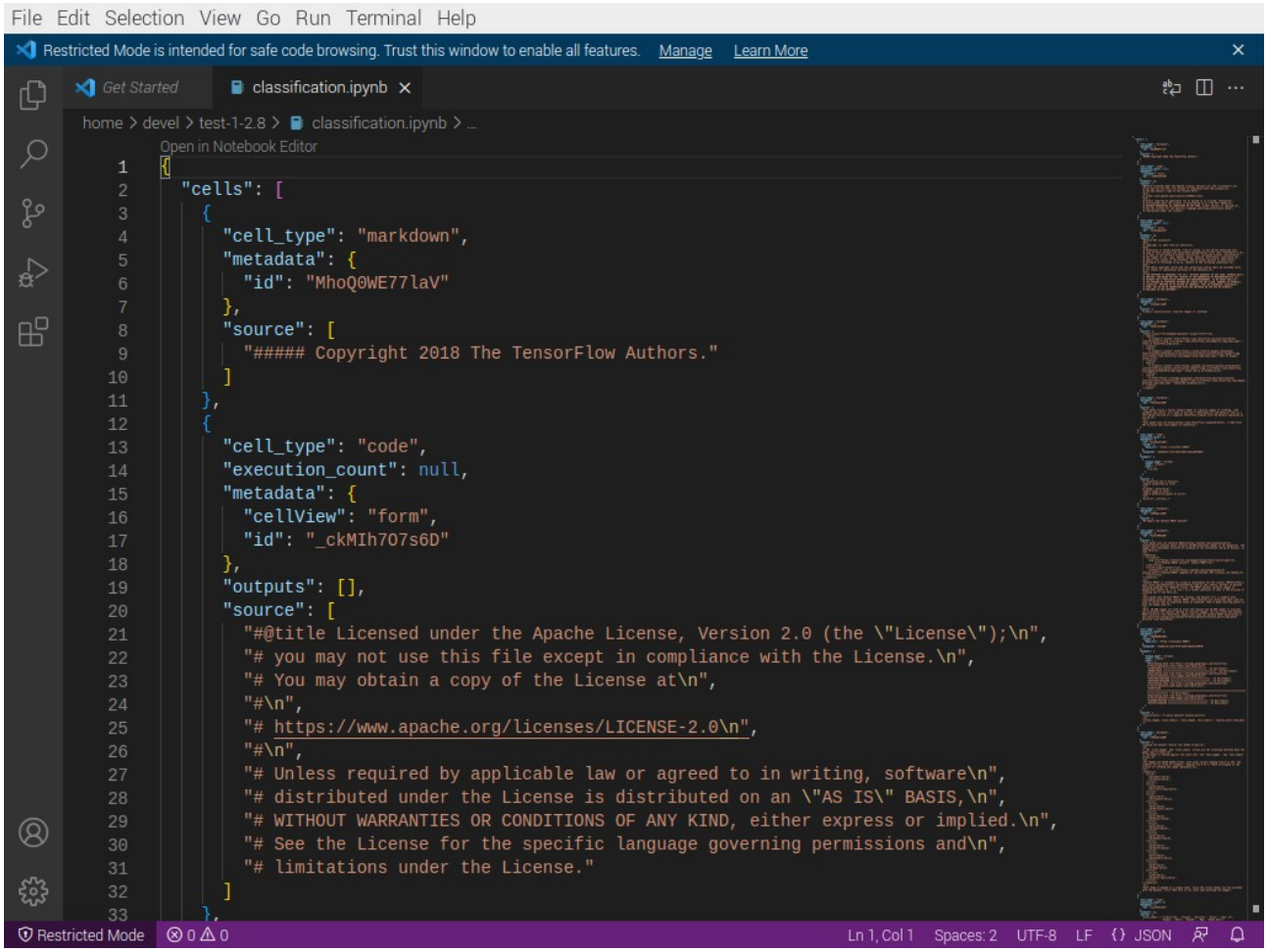
RaspBerry Pi 4 classification TensorFlow
10/21/22

**********Default**********

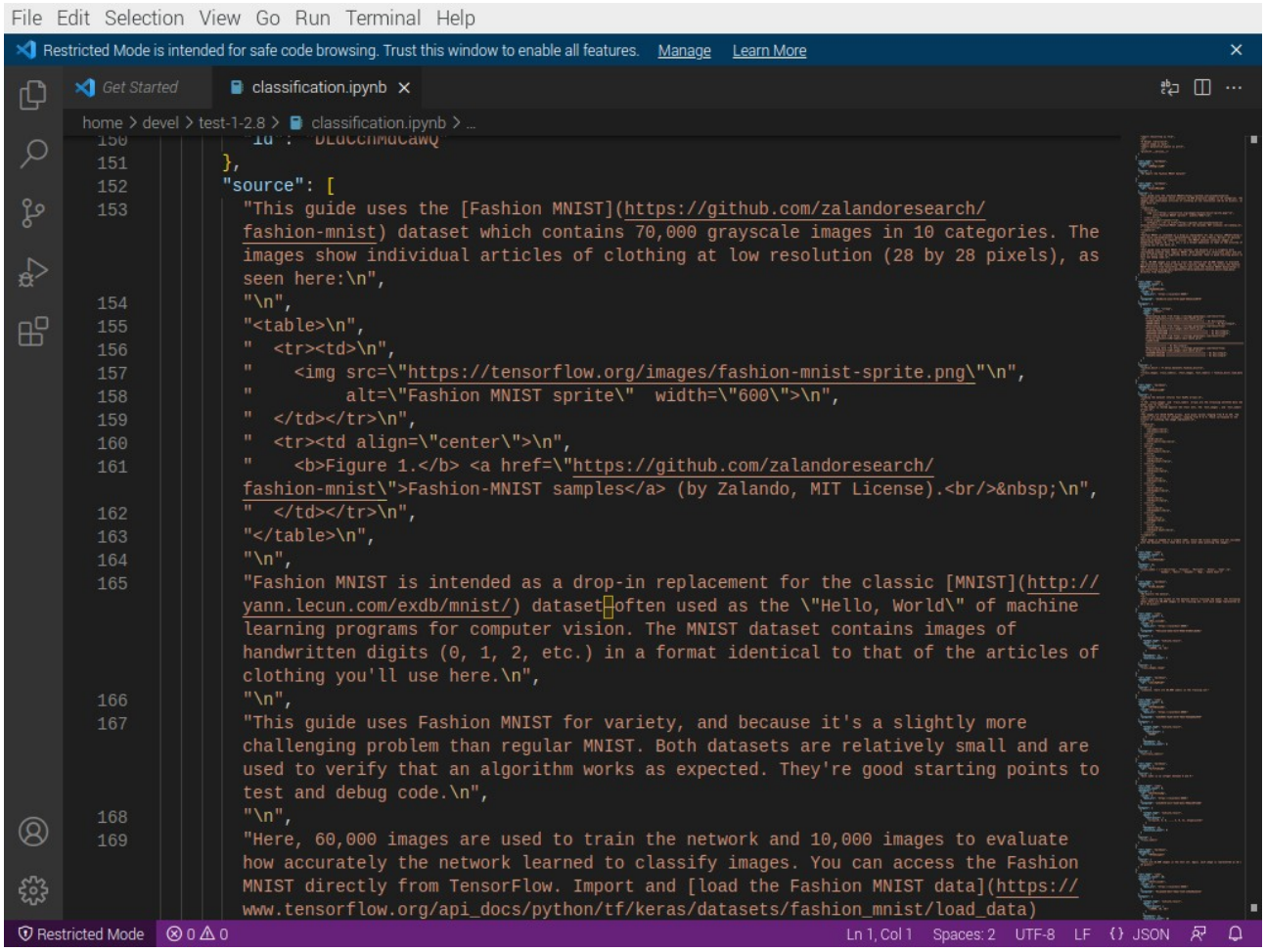
This can be run on a CoLab at Google classification.ipynb

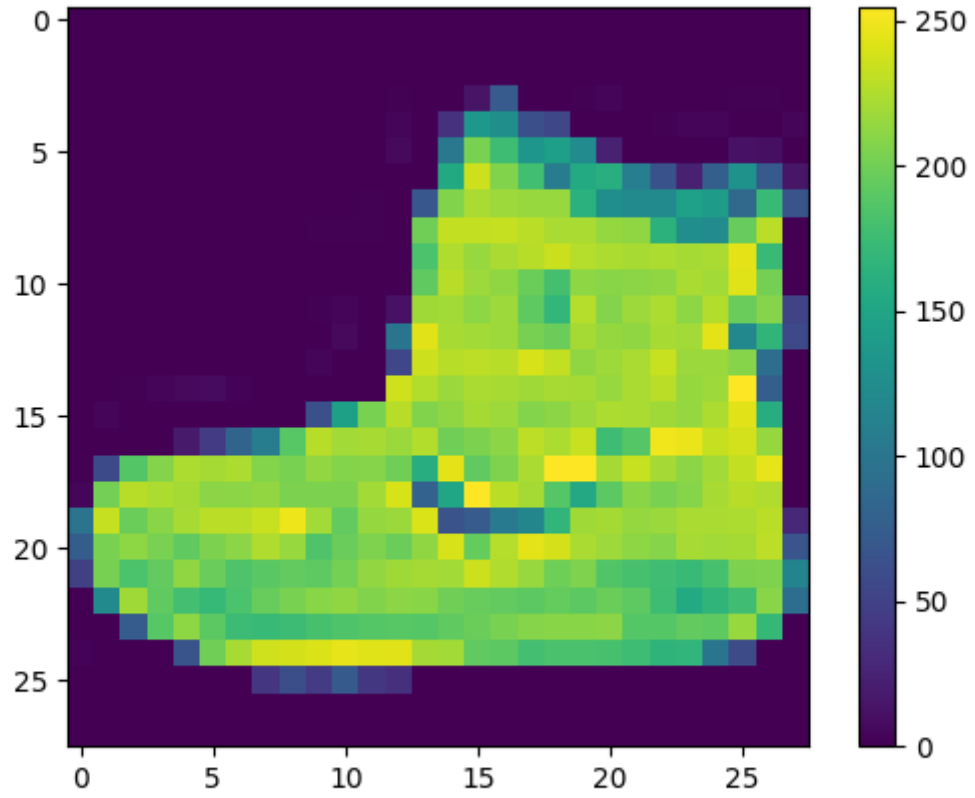


This can be run on a RaspBerry Pi 4 B with 4Gb classification.ipynb



This can be run on RaspBerry Pi 4 classification.ipynb

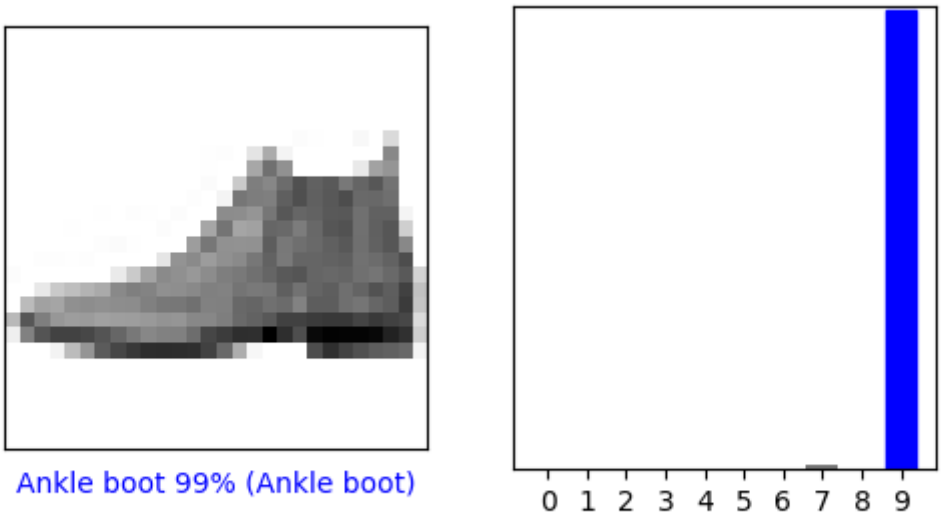

File Edit Selection View Go Run Terminal Help
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
Get Started
classification.ipynb
home > devel > test-1-2.8 > classification.ipynb > ...
"id": "DLdcHMdcaWQ"
},
"source": [
"This guide uses the [Fashion MNIST](https://github.com/zalandoresearch/fashion-mnist) dataset which contains 70,000 grayscale images in 10 categories. The images show individual articles of clothing at low resolution (28 by 28 pixels), as seen here:\n",
"\n",
"<table>\n",
" <tr><td>\n",
" <img src=\"https://tensorflow.org/images/fashion-mnist-sprite.png\"\n",
" alt=\"Fashion MNIST sprite\" width=\"600\">\n",
" </td></tr>\n",
" <tr><td align=\"center\">\n",
" Figure 1. Fashion-MNIST samples (by Zalando, MIT License).
 \n",
" </td></tr>\n",
"</table>\n",
"\n",
"Fashion MNIST is intended as a drop-in replacement for the classic [MNIST](http://yann.lecun.com/exdb/mnist/) dataset often used as the \"Hello, World\" of machine learning programs for computer vision. The MNIST dataset contains images of handwritten digits (0, 1, 2, etc.) in a format identical to that of the articles of clothing you'll use here.\n",
"\n",
"This guide uses Fashion MNIST for variety, and because it's a slightly more challenging problem than regular MNIST. Both datasets are relatively small and are used to verify that an algorithm works as expected. They're good starting points to test and debug code.\n",
"\n",
"Here, 60,000 images are used to train the network and 10,000 images to evaluate how accurately the network learned to classify images. You can access the Fashion MNIST directly from TensorFlow. Import and [load the Fashion MNIST data](https://www.tensorflow.org/api_docs/python/tf/keras/datasets/fashion_mnist/load_data)
Restricted Mode
0 0
Ln 1, Col 1 Spaces: 2 UTF-8 LF JSON



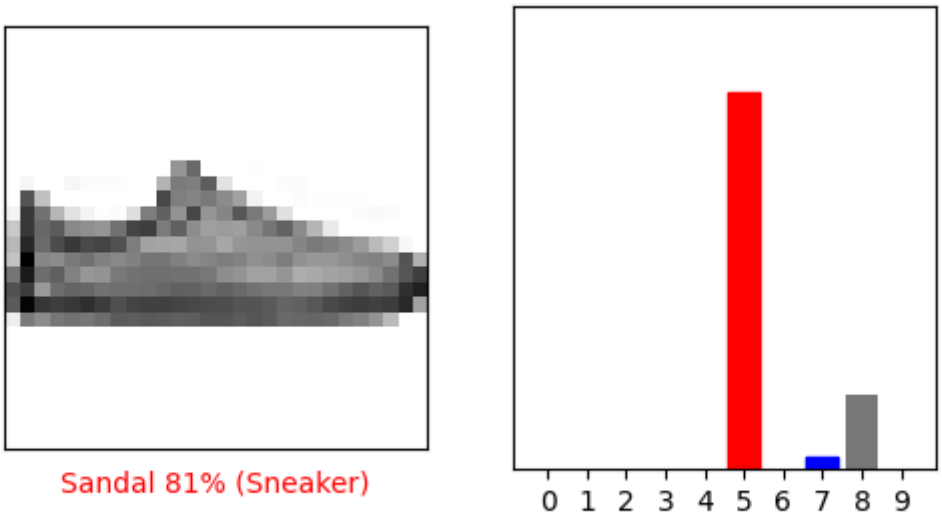
xxx


Ankle boot
T-shirt/top
T-shirt/top
Dress
T-shirt/top
Pullover
Sneaker
Pullover
Sandal
Sandal
T-shirt/top
Ankle boot
Sandal
Sandal
Sneaker
Ankle boot
Trouser
T-shirt/top
Shirt
Coat
Dress
Trouser
Coat
Bag
Coat

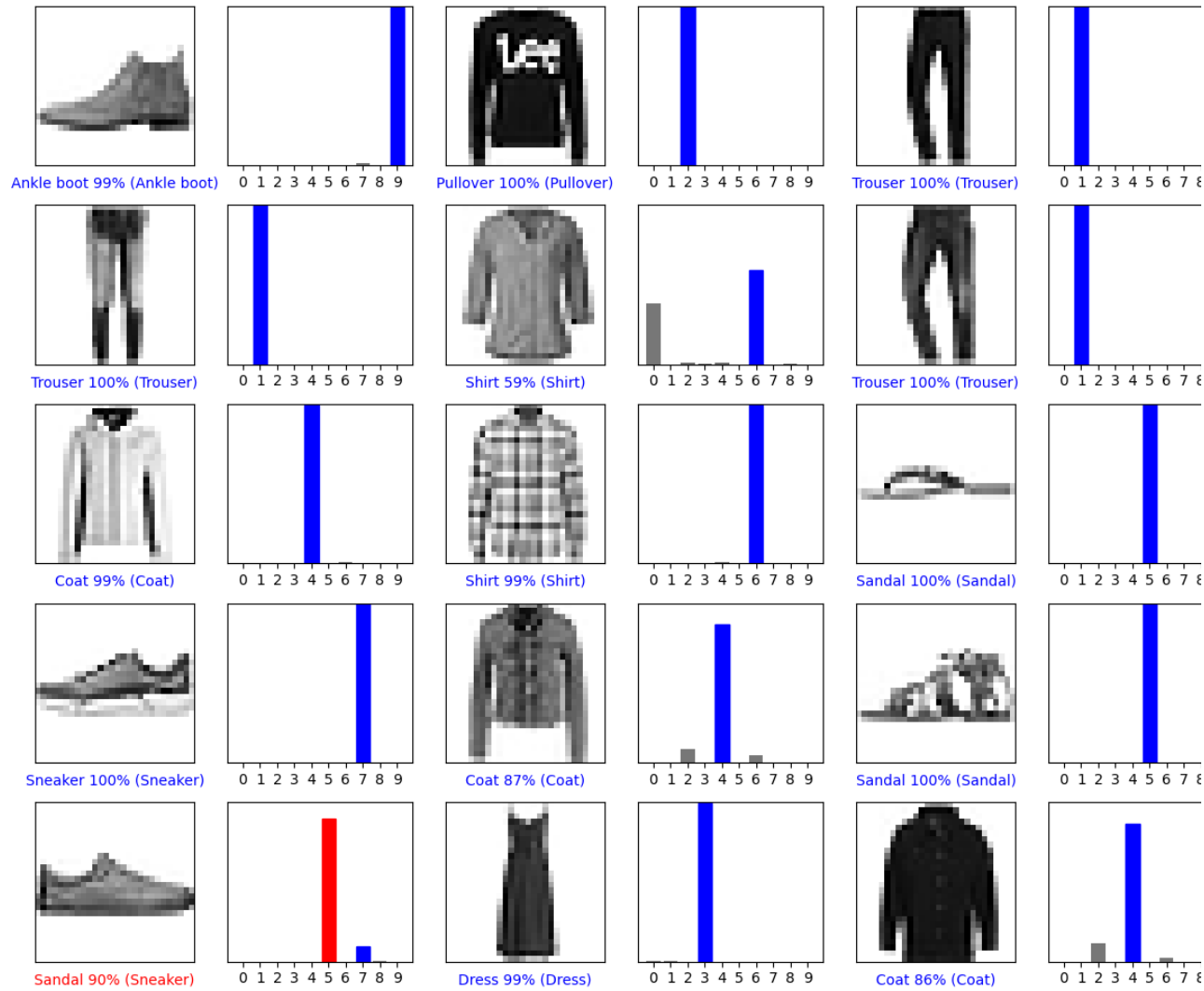
XXX



xxx



Images after testing


Ankle boot 99% (Ankle boot)
Pullover 100% (Pullover)
Trouser 100% (Trouser)
Trouser 100% (Trouser)
Shirt 59% (Shirt)
Trouser 100% (Trouser)
Coat 99% (Coat)
Shirt 99% (Shirt)
Sandal 100% (Sandal)
Sneaker 100% (Sneaker)
Coat 87% (Coat)
Sandal 100% (Sandal)
Sandal 90% (Sneaker)
Dress 99% (Dress)
Coat 86% (Coat)
0 1 2 3 4 5 6 7 8 9