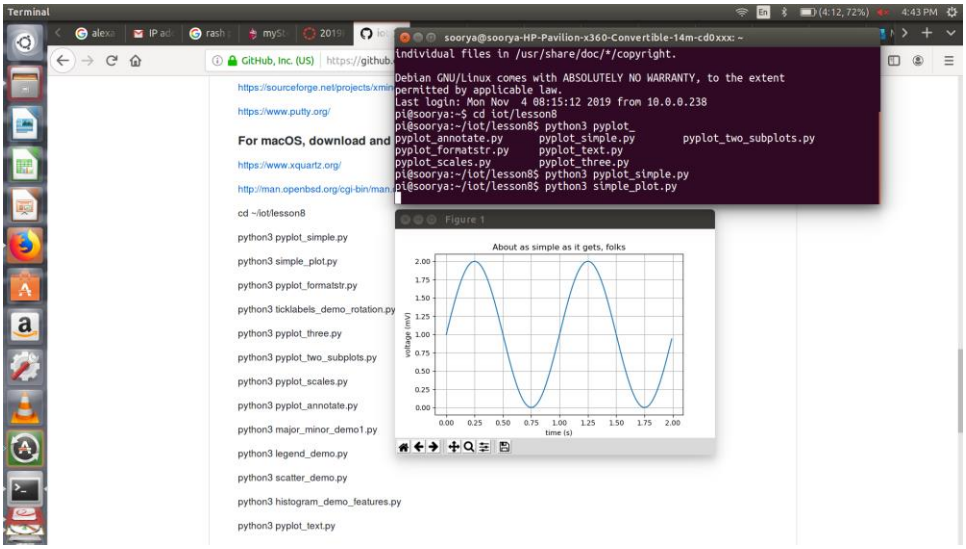
EE 629 – IoT using Raspberry Pi

Lesson 8 – Exercises - **Done**

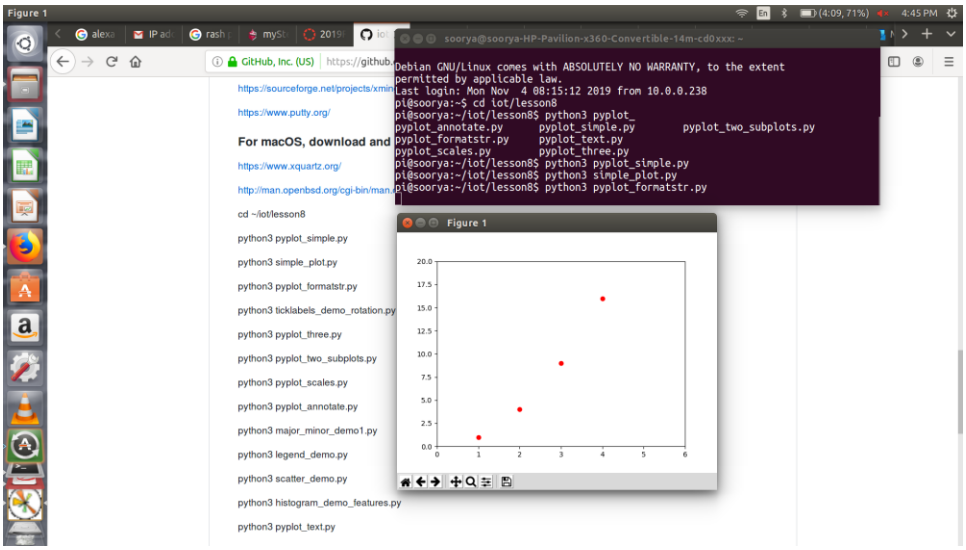
Data Analysis:

- Installed SciPy, Matplotlib, pandas, and dependencies on Raspberry Pi
- Installed NumPy, scikit-learn, TensorFlow, and Keras on Raspberry Pi
- Enables X11 forwarding with SSH -Y
- Ran all the python programs mentioned in the Lesson8 exercise and viewed the results
  pyplot_simple.py

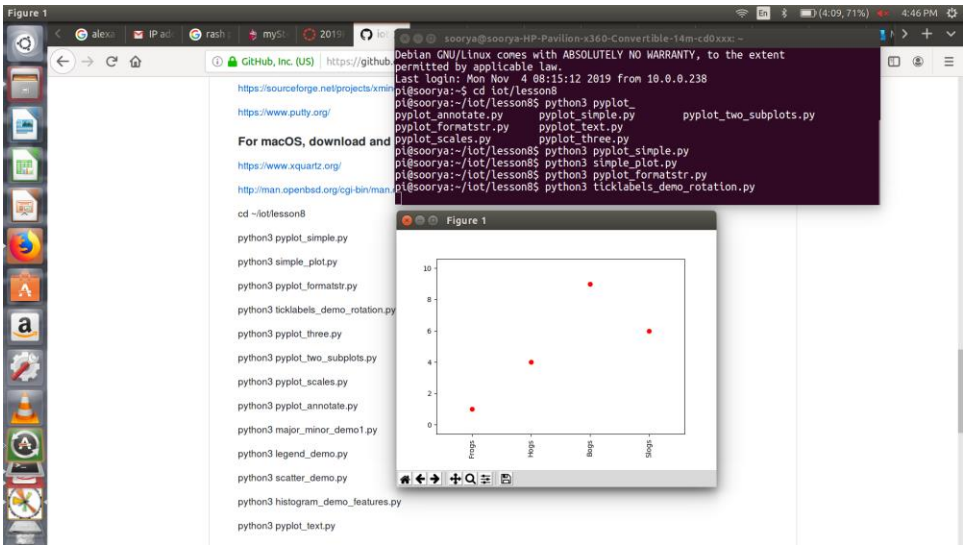
python3 simple_plot.py



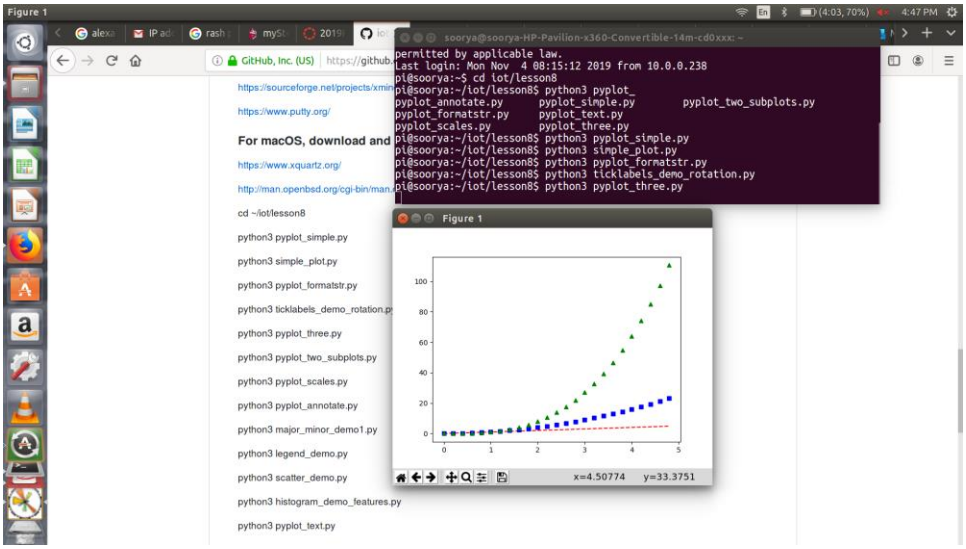
python3 pyplot_formatstr.py



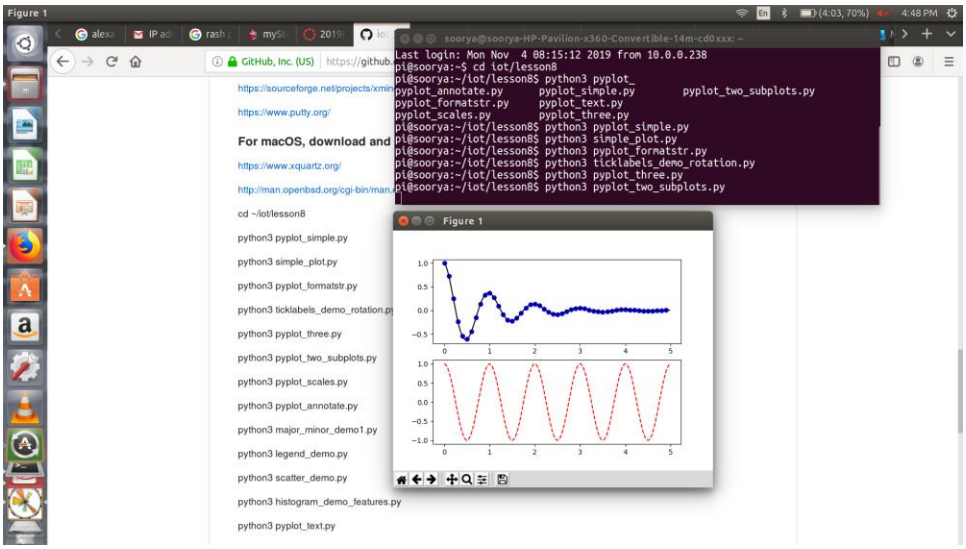
python3 ticklabels_demo_rotation.py



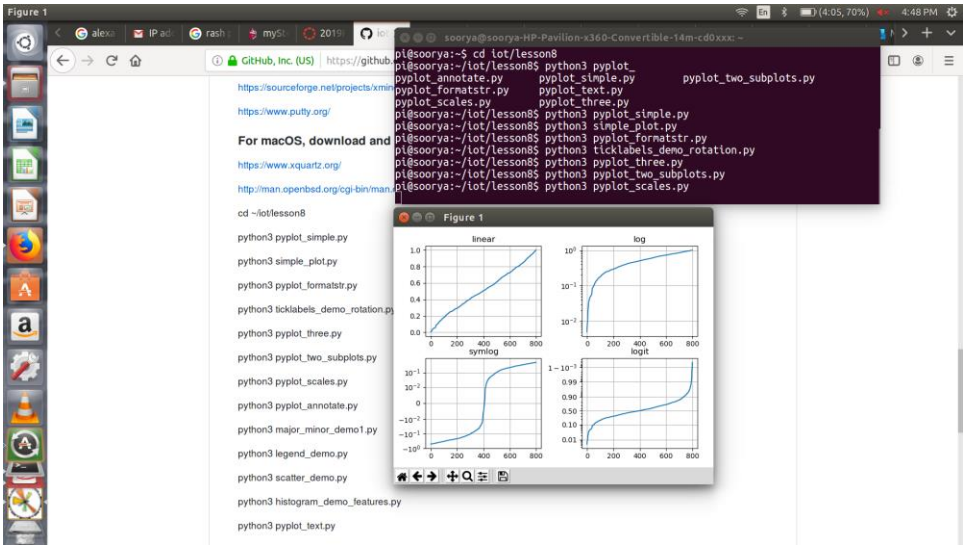
python3 pyplot_three.py



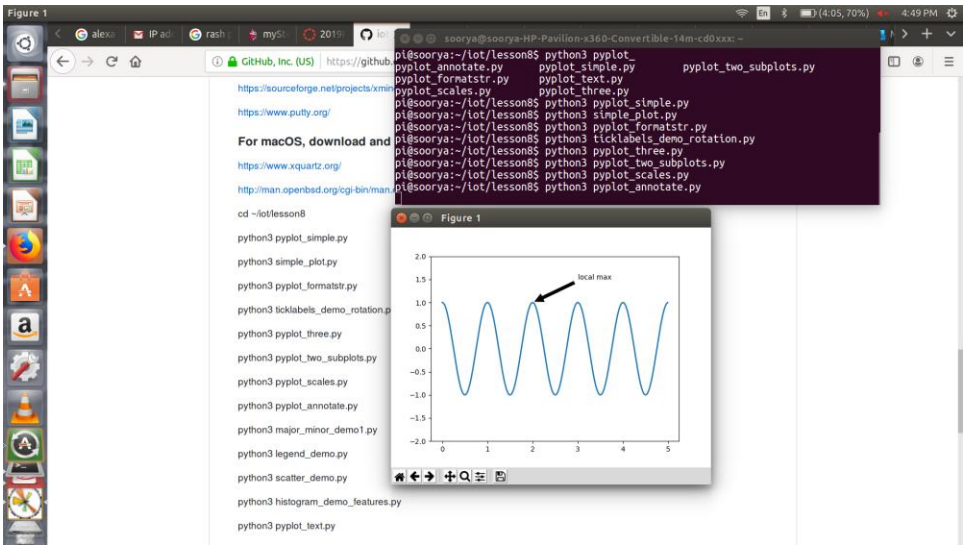
python3 pyplot_two_subplots.py



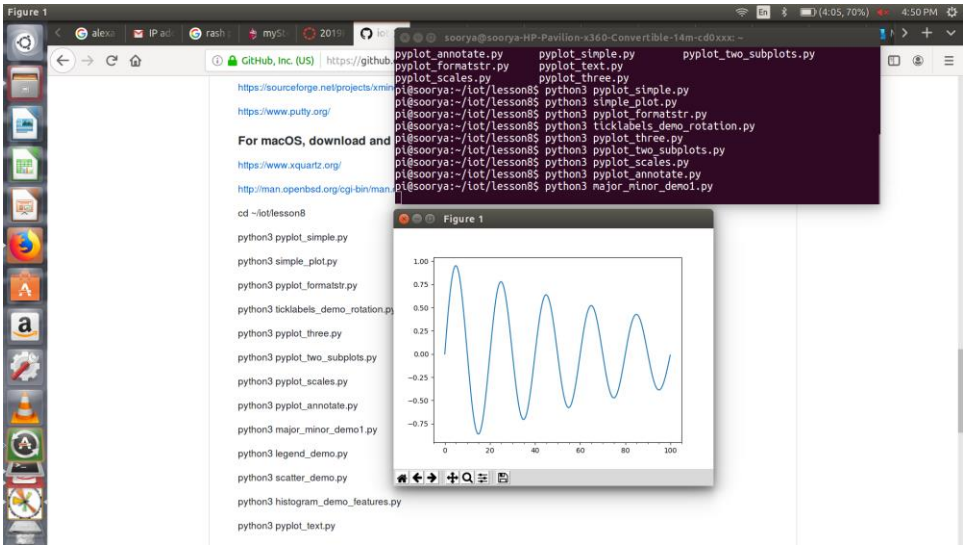
python3 pyplot_scales.py



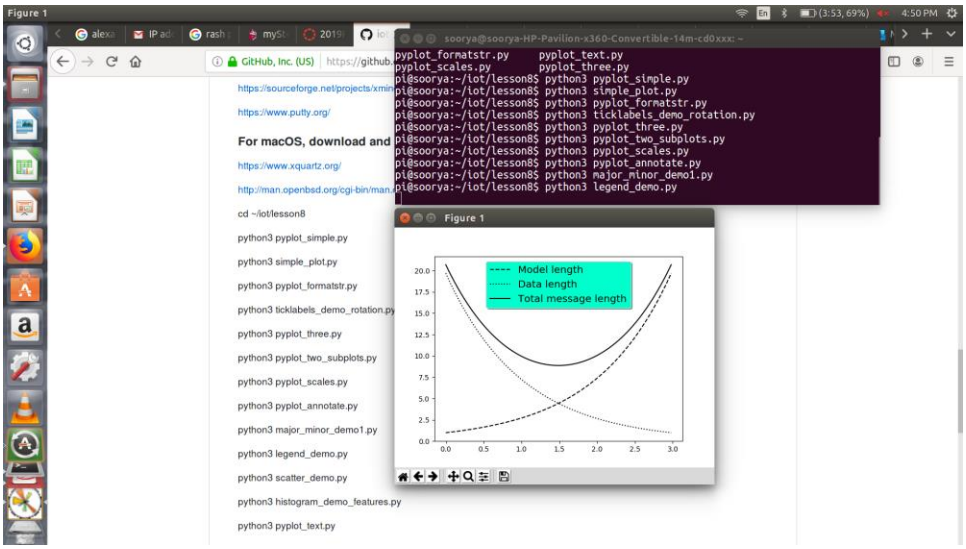
python3 pyplot_annotate.py



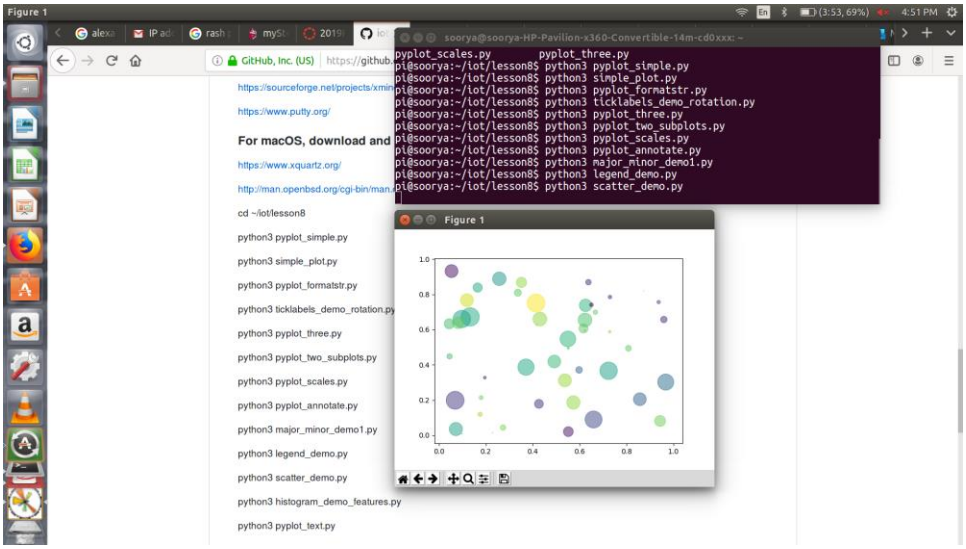
python3 major_minor_demo1.py



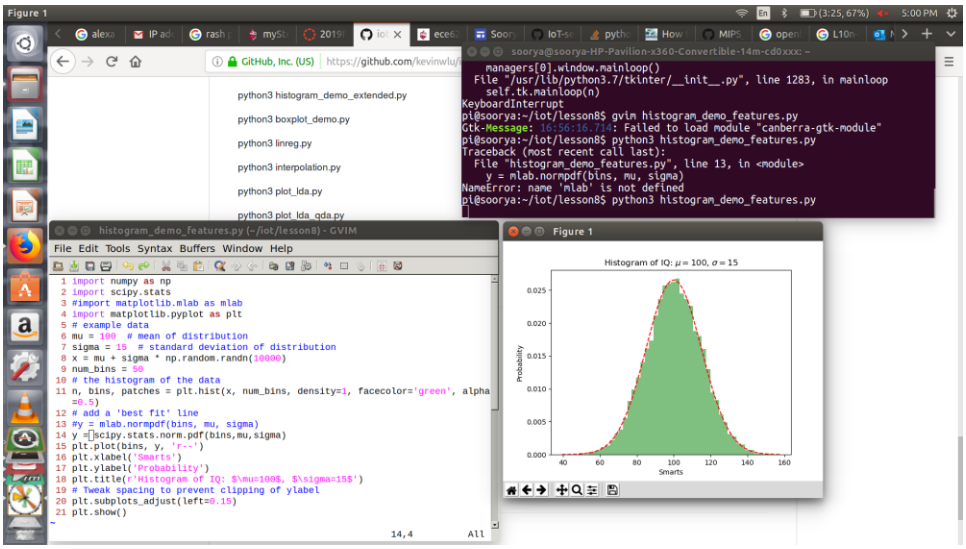
python3 legend_demo.py



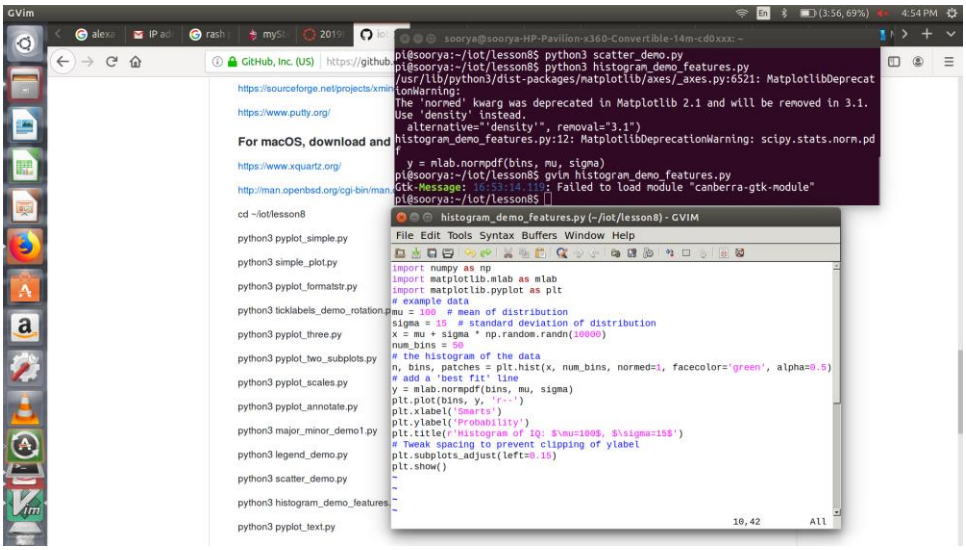
python3 scatter_demo.py



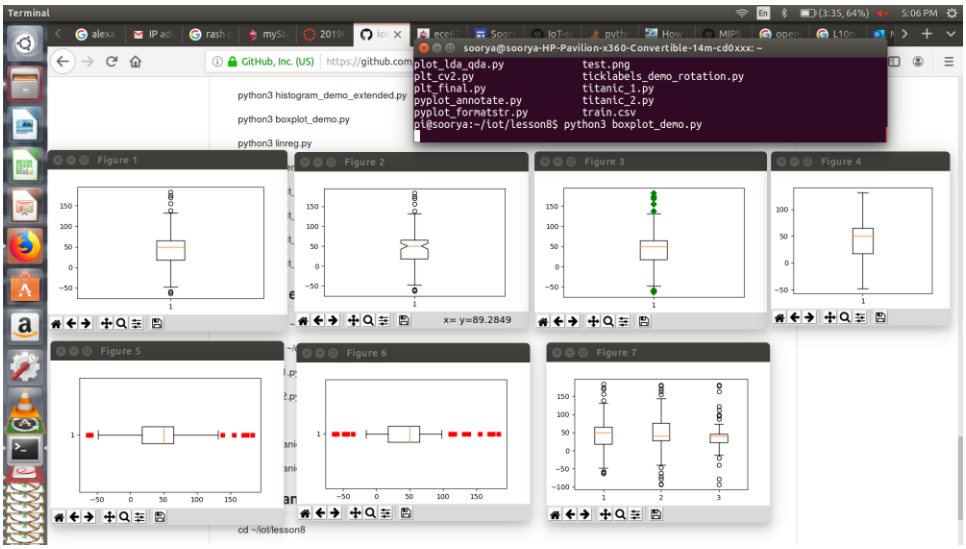
python3 histogram_demo_features.py



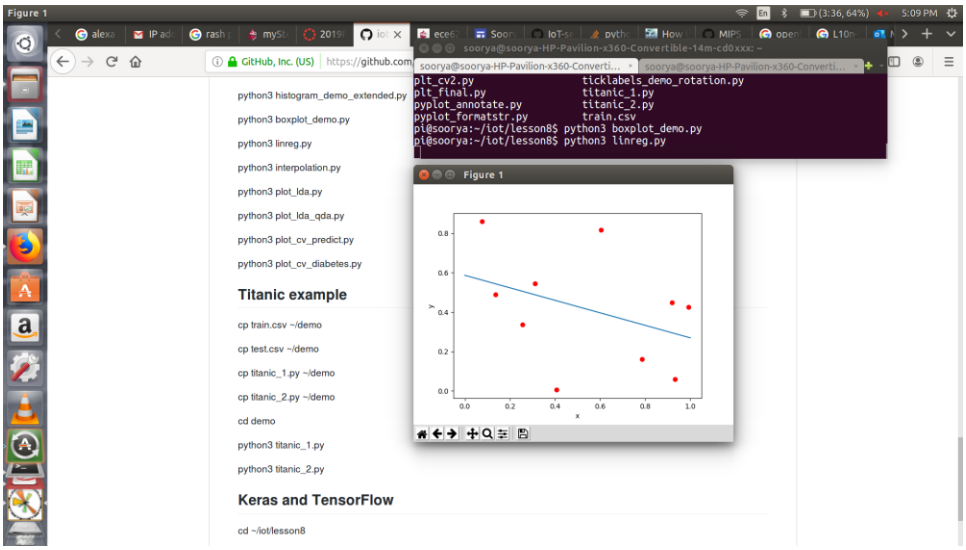
python3 histogram_demo_extended.py



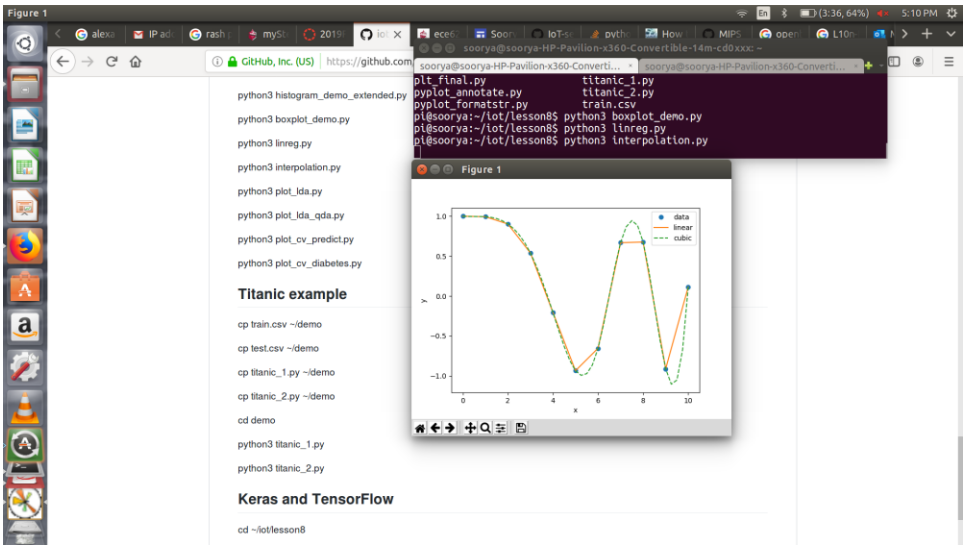
python3 boxplot_demo.py



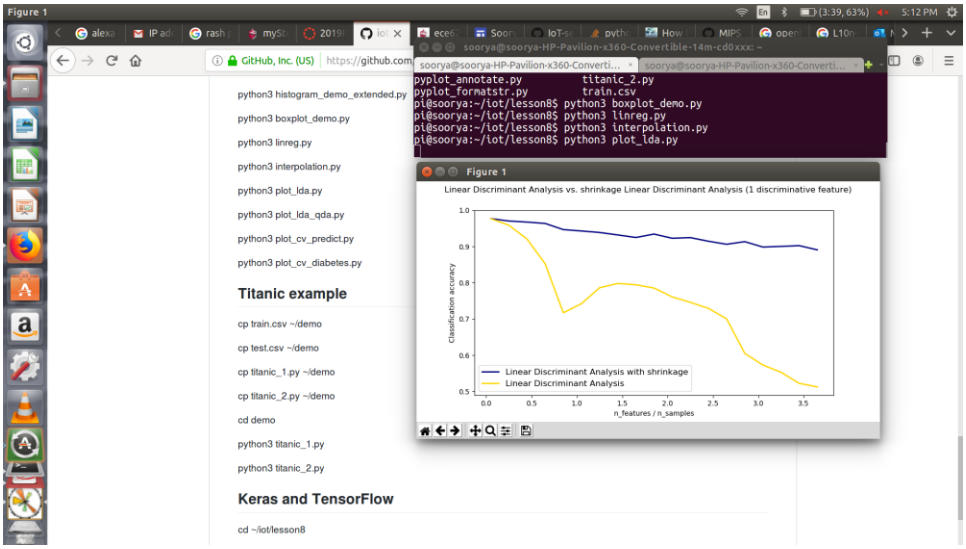
python3 linreg.py



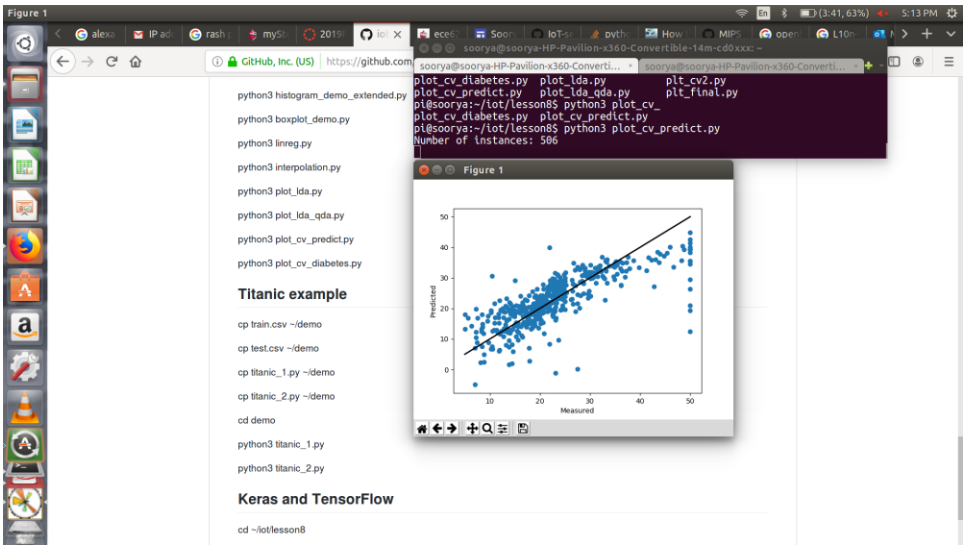
python3 interpolation.py



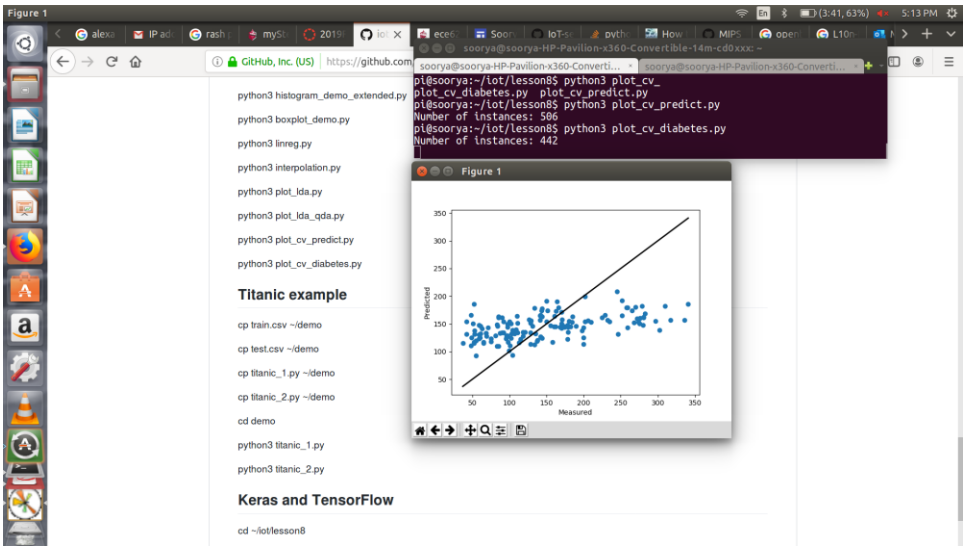
python3 plot_lda.py



python3 plot_cv_predict.py

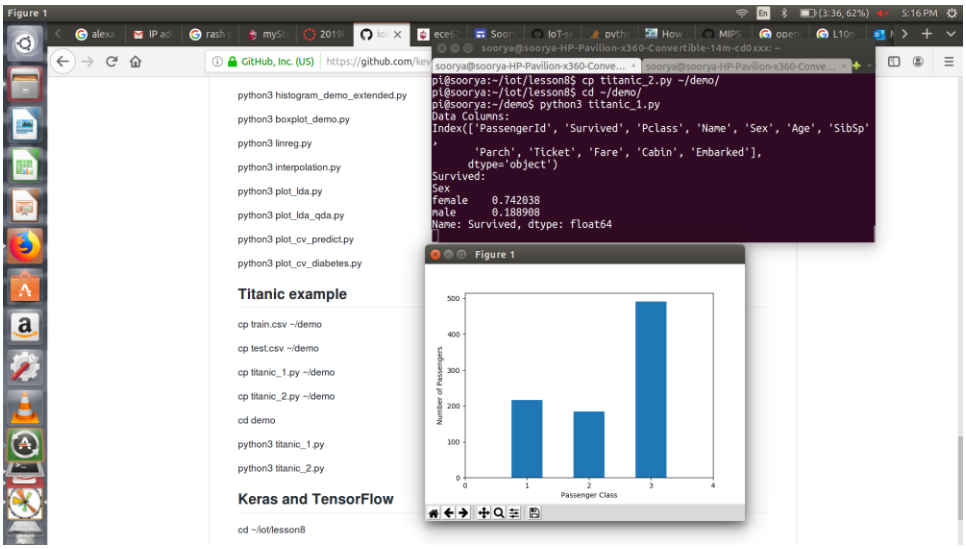


python3 plot_cv_diabetes.py

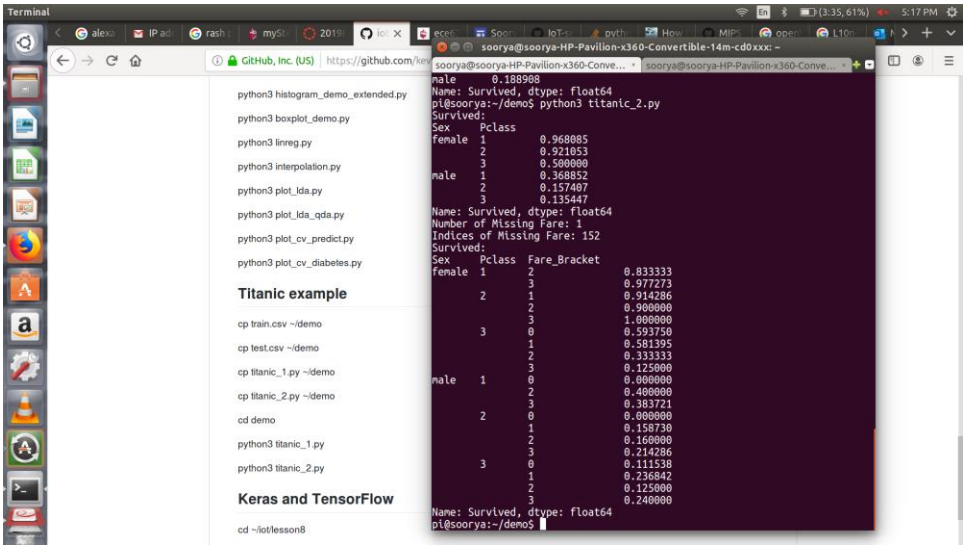


Titanic example

python3 titanic_1.py



python3 titanic_2.py



Keras and TensorFlow

python3 keras_diabetes.py

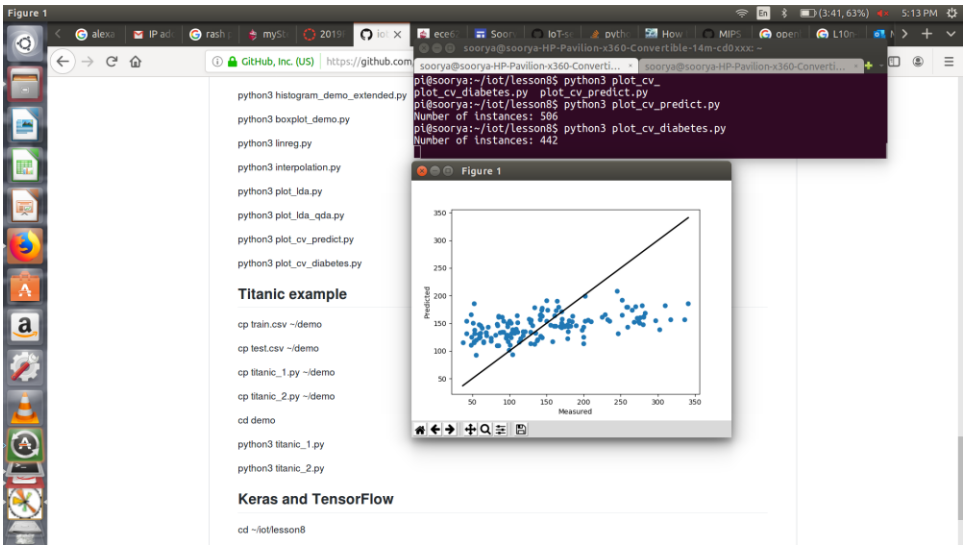


Figure 1
python3 histogram_demo_extended.py
python3 boxplot_demo.py
python3 linreg.py
python3 interpolation.py
python3 plot_lda.py
python3 plot_lda_qda.py
python3 plot_cv_predict.py
python3 plot_cv_diabetes.py
Titanic example
cp train.csv ~/demo
cp test.csv ~/demo
cp titanic_1.py ~/demo
cp titanic_2.py ~/demo
cd demo
python3 titanic_1.py
python3 titanic_2.py
Keras and TensorFlow
cd ~/iot/lesson8
pi@soorya:~/iot/lesson8$ python3 plot_cv_
plot_cv_diabetes.py plot_cv_predict.py
pi@soorya:~/iot/lesson8$ python3 plot_cv_predict.py
Number of instances: 506
pi@soorya:~/iot/lesson8$ python3 plot_cv_diabetes.py
Number of instances: 442
Figure 1
Predicted
Measured