

For the following exercises, write scripts a text editor and run them from the command line

- 1) Using `Python_Plot_Example.py` as a template
  - a) plot a set of linear data that you come up with on your own with a linear fit overlaid. Does the slope and y-intercept match what you expect?
  - b) In this script, change the color of the data points so that they're red and the line blue. Next set the data points and the line to be two other colors of your choice.
  - c) Create a data set that is roughly parabolic. Fit this data set to a polynomial of order 2 and make a plot where the data is overlaid with a line. Is the fitted line smooth? Why do you think this is?
- 2) Using `Python_hist_Example.py` as a template
  - a) Change the list of mybins so that they include half integers (0.5, 1.5, 2.5,.....9.5). How does the plot change?