

Monday 29 September - Class Session 10

Homework:

Read Budny: Sec 4.13, 4.14

Programming Assignment 5: Due Wednesday 8 October (Counts as 2 assignments)

Class Activities:

1. Workshop 15
2. Modify your function from Class Activity 09 - 2 to add a new return variable called **linetype** that holds the information about the line to plot with. As with **symbol**, **linetype** should have a color and line style in a single string variable.
3. Create separate functions for plotting linear, semilog, and loglog fits to data. Each function has the following requirements
needs: xdata, ydata, symbol, linetype
results: m, b (if linear)
A, B (if semilog or loglog)

Each function is to do the following:

- delete unplotable data (if necessary)
- determine appropriate fit to data
- create (xfit,yfit) set for line display
- display data points on graph as distinct data points
- display linear fit on graph

4. Modify your script from Class Activity 09 - 3 to do two things:
 - after asking the user for what type of plot to display,
 - display requested plot with best fit line
 - add a while loop so that user can look at a different plot type if desired

Group assignment:

Turn in a printed copy of your script from activity 4 and the loglog function from activity 3. Test your script by plotting the data contained in ca09dat.dat (available in the get12 directory). Print and turn in the plot that best shows a straight-line relation.