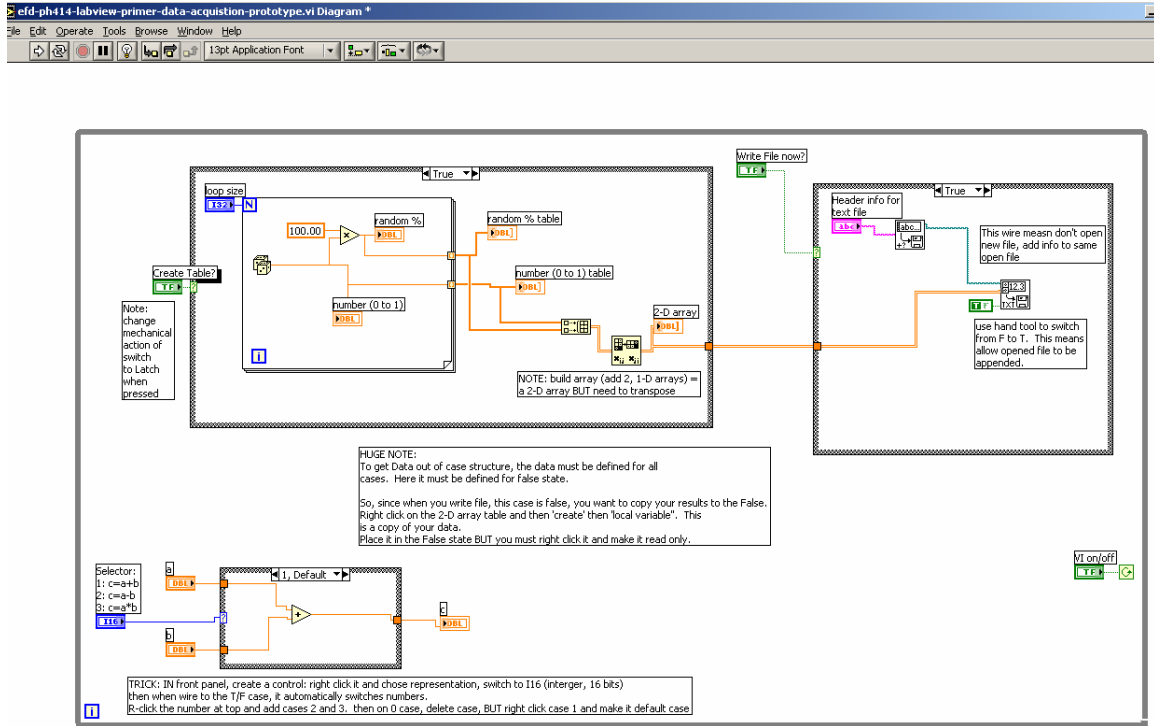
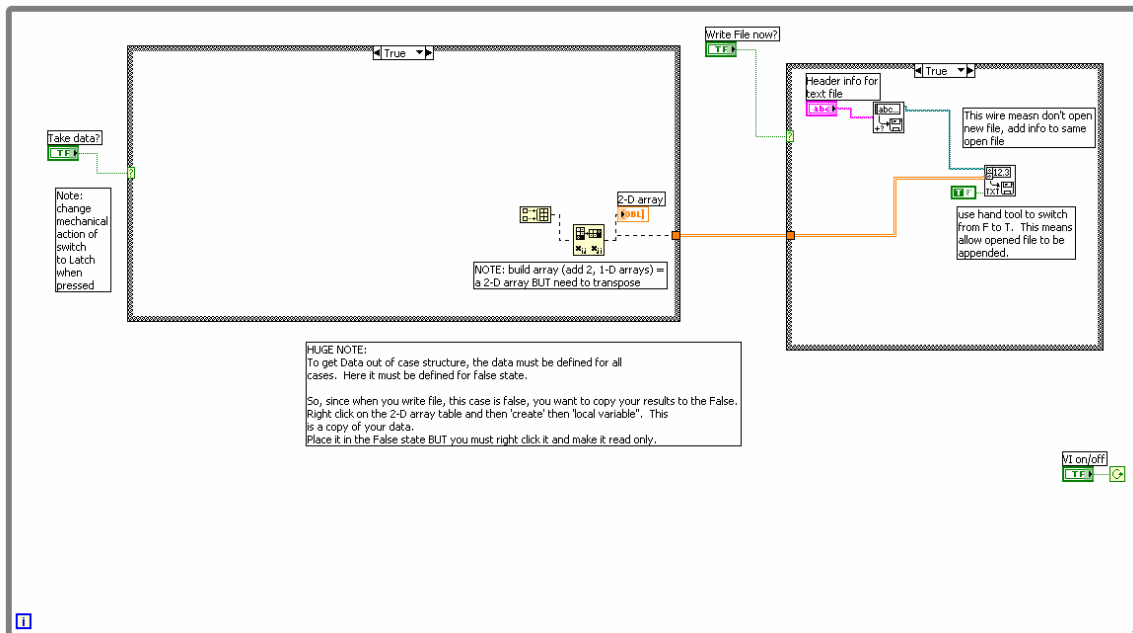


E.F. Deveney
 PH414 LabView Data Acquisition Primer:

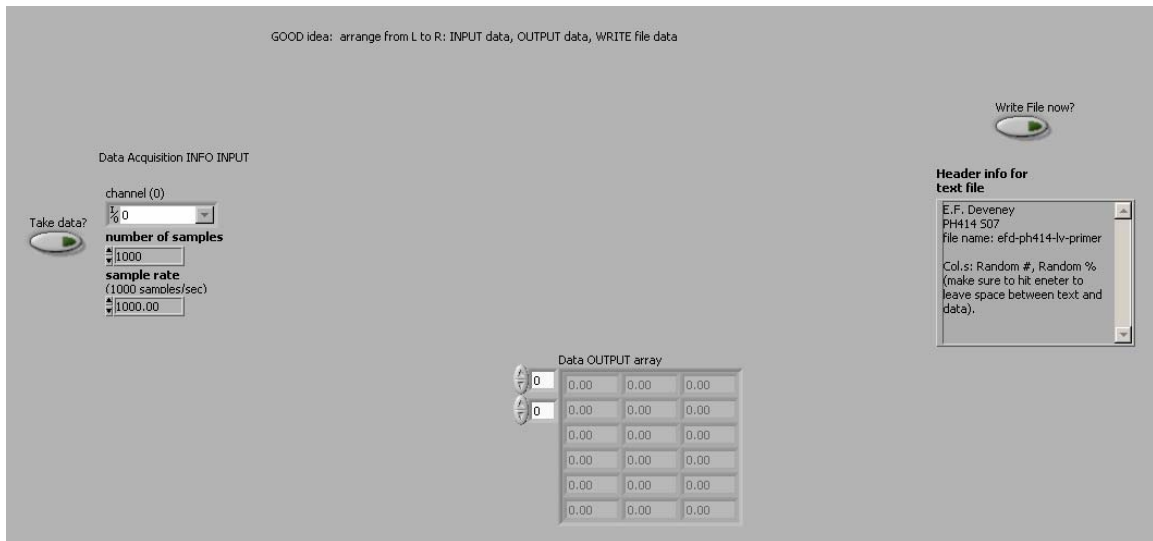
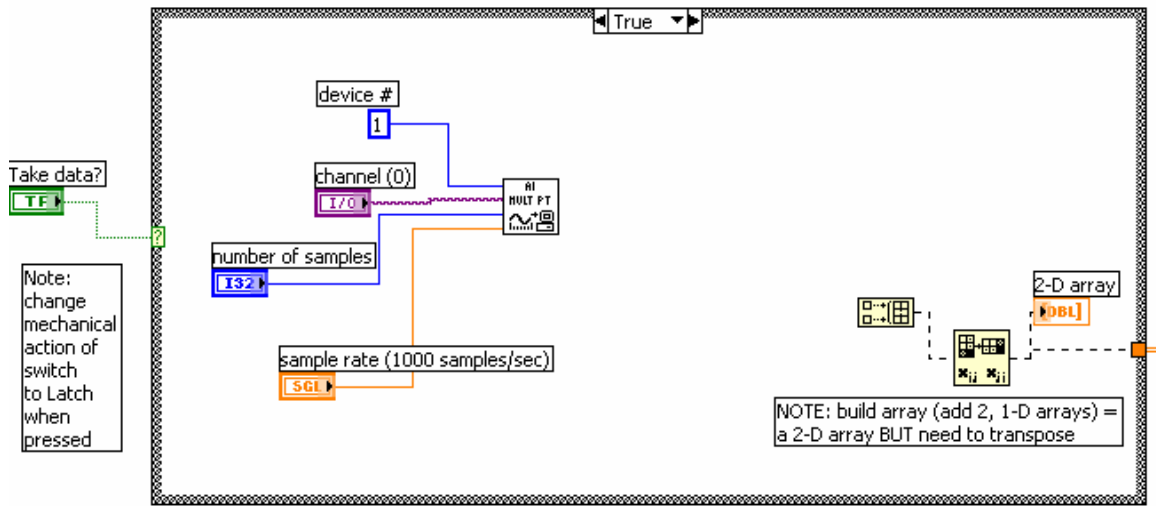
Begin with last Case Structure Primer *.vi



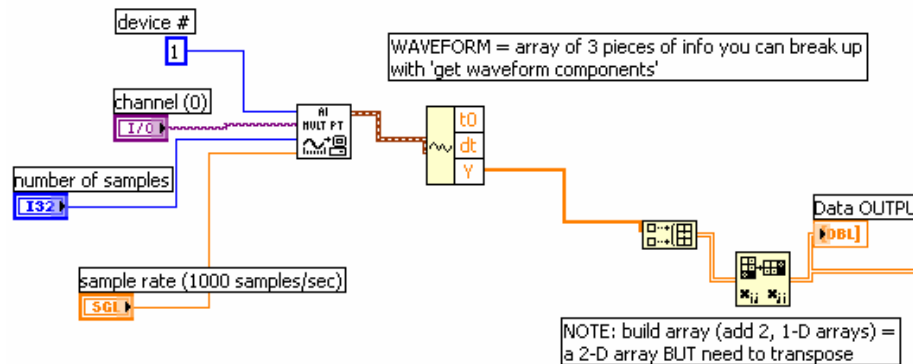
Gut unneeded stuff...



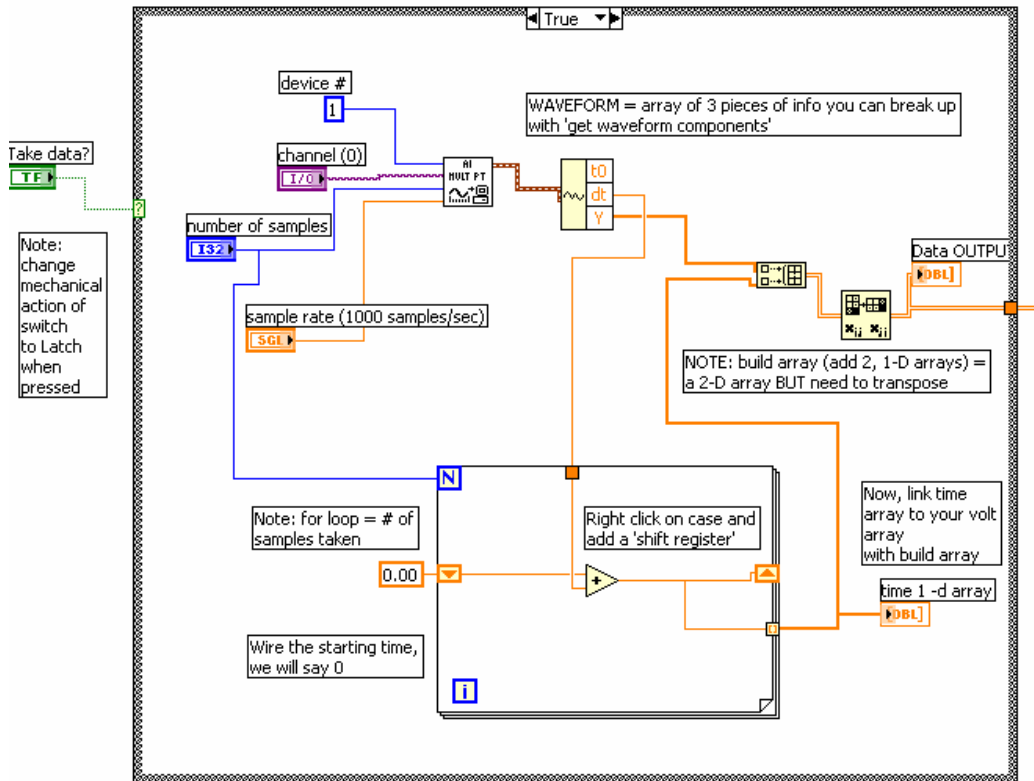
Next add data acquisition vi and then wire necessary info to it



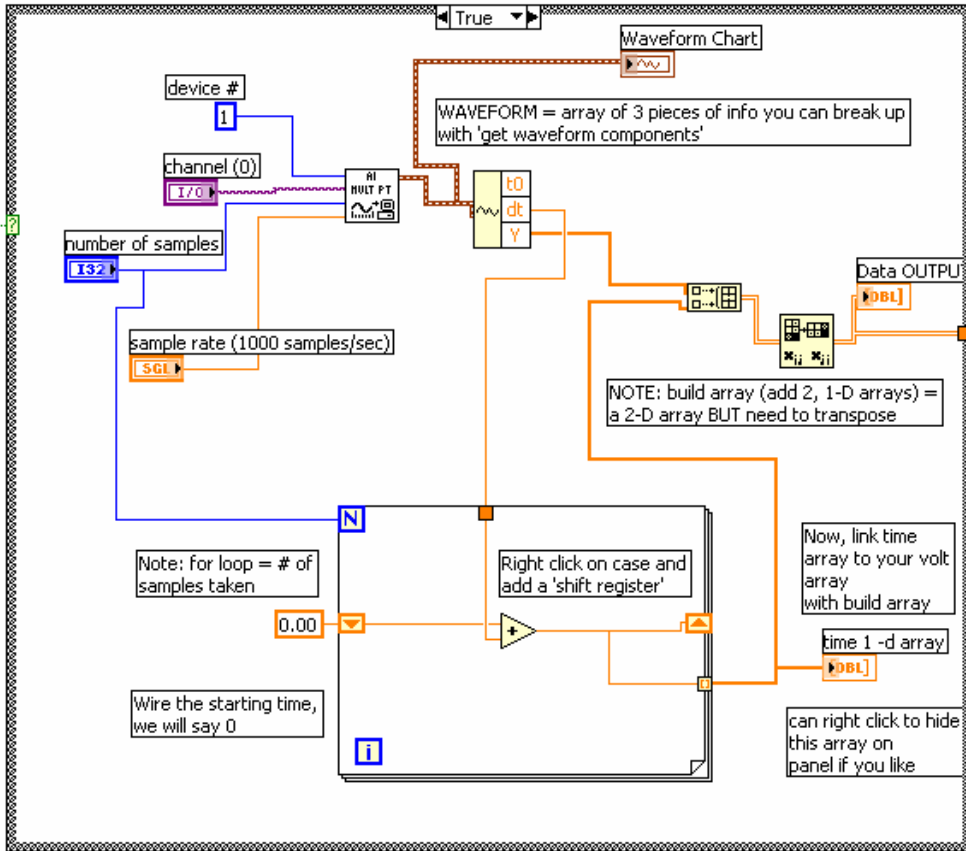
Now this gets the measured values of voltages (y)



But now we want to plot Voltages vs time. We need the time values: Will need a 'for' loop and to its case add 'shift register' which takes an initial value, then does something to it, and then carries that new number through thru the loop again until the 'for' is completed. It also keeps track of each of the value at each step and makes an array. Thus we will make a time array, starting at t_0 and then adding dt for a loop = the number of sample voltages taken.



OK. Last, add a graph indicator. You need to do this from the front panel. Note, inside you wire this to the waveform from the data acquisition and I also added a note on the time array to hide it from the front panel.



Now make sure to change your Header Data for the text file (and save it as default) and the front panel should now make logical sense:

E.F. Deveney: PH414 exercise

BUILD this right from Case Structure Primer!!!!!!

V1 on/off

GOOD idea: arrange from L to R: INPUT data, OUTPUT data, WRITE file data

Write File now?

Header info for text file

E.F. Deveney
PH414 S07
File name: efd-ph414-iv-primer-data-acquis-prototype
Col.s: TIME (sec), Measurement (Volts)
(make sure to hit enter to leave space between text and data).

Data Acquisition INFO INPUT

channel (0) 0

number of samples 1000

sample rate (1000 samples/sec) 1000.00

Take data?

Waveform Chart

Plot 0

Amplitude

10.0
7.5
5.0
2.5
0.0
-2.5
-5.0
-7.5
-10.0

19:00:00.00 19:00:05.00
12/31/1903 12/31/1903

Time

Data OUTPUT array

0	0.00	0.00	0.00
0	0.00	0.00	0.00
	0.00	0.00	0.00
	0.00	0.00	0.00
	0.00	0.00	0.00
	0.00	0.00	0.00