

LABVIEW Assignment #1, due before Friday September 17th at 3:00pm. Simply demonstrate your five LABVIEW programs working. Grading for this assignment is simply full credit if you did the assignment and no credit if you did not complete the assignment. Make sure to ask questions if you get stuck.

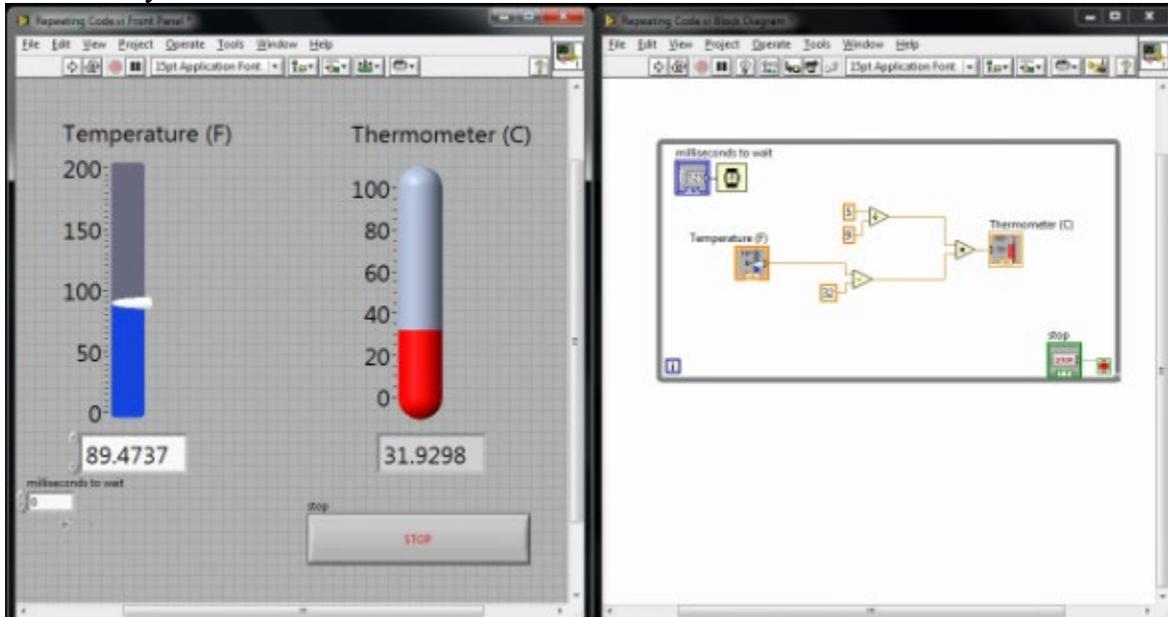
Read through at least the first two sections at the site <http://www.ni.com/gettingstarted/labviewbasics>

LABVIEW Environment Basics and *Dataflow Programming Basics*

And Watch at least the first two videos and the tenth video at the site

<https://www.youtube.com/playlist?list=PLB968815D7BB78F9C>

1. Then reproduce (does not have to be exactly the same) the Fahrenheit to Celsius LABVIEW program that **uses a loop structure** to continuously run until a Stop button is pressed. Add some bells and whistles if you would like.



Read through all 12 sections at the site <http://www.ni.com/gettingstarted/labviewbasics>

And watch the first 10 videos at the site

<https://www.youtube.com/playlist?list=PLB968815D7BB78F9C>

You can find other good Youtube videos. Here are a few others I found to get you started

https://www.youtube.com/watch?v=Em5R_RM8E08

<https://www.youtube.com/watch?v=bflByHG5jdc>

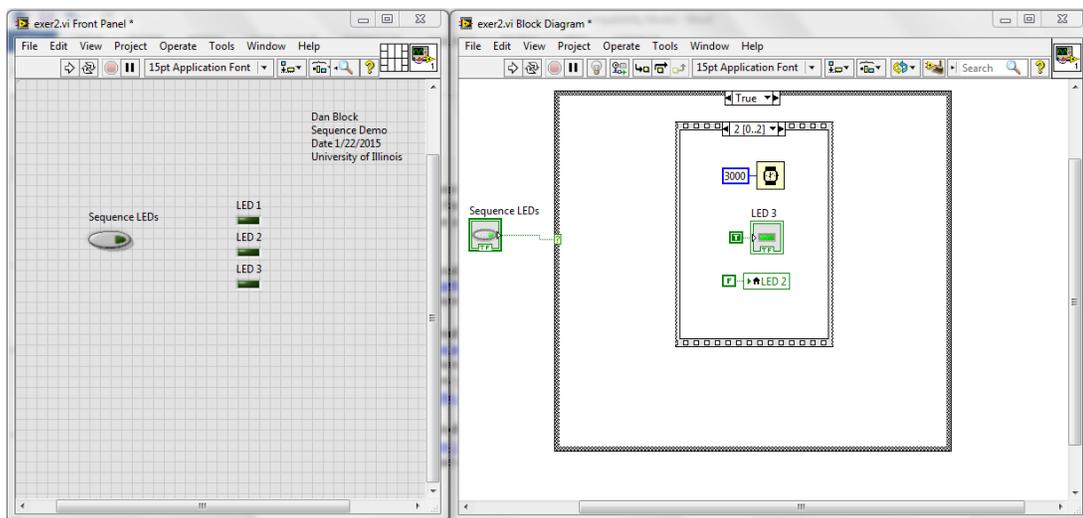
<https://www.youtube.com/watch?v=0Ea2IQeCIMY>

<https://www.youtube.com/watch?v=QxoJljThkKk>

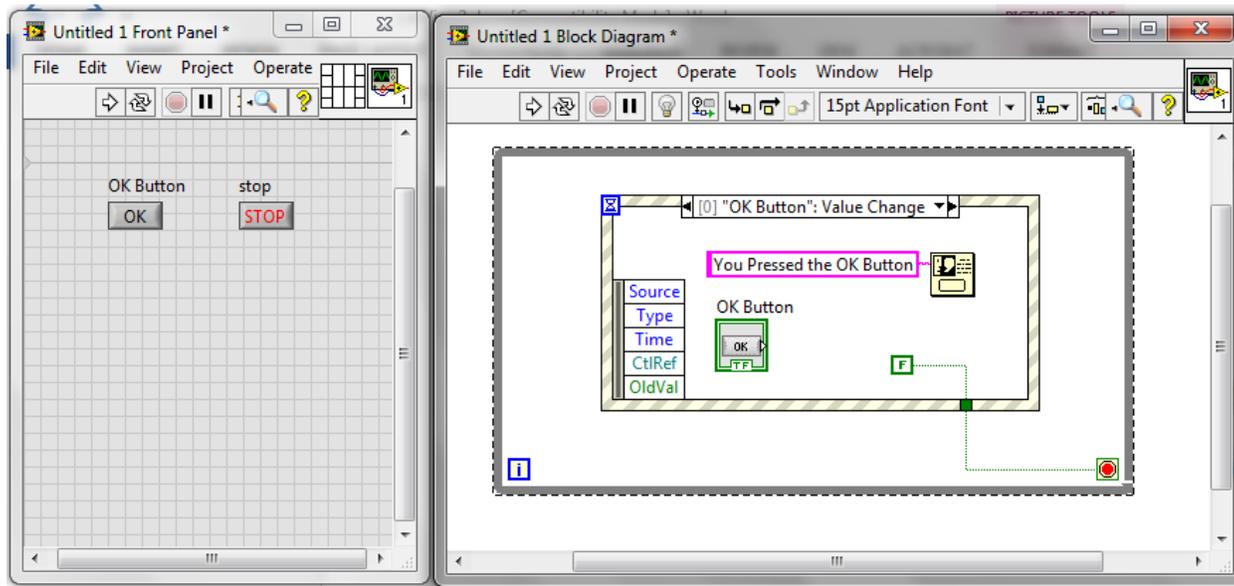
And watch the below youtube video that introduces sequence structures

<https://www.youtube.com/watch?v=DjN5Fpsjwng>

2. To give you an introduction to sequence structures, reproduce the VI demonstrated in the youtube video <https://www.youtube.com/watch?v=03PykG1O1x0> . You may need to find some online help on “Case structures” as they are used in this video but not explained.



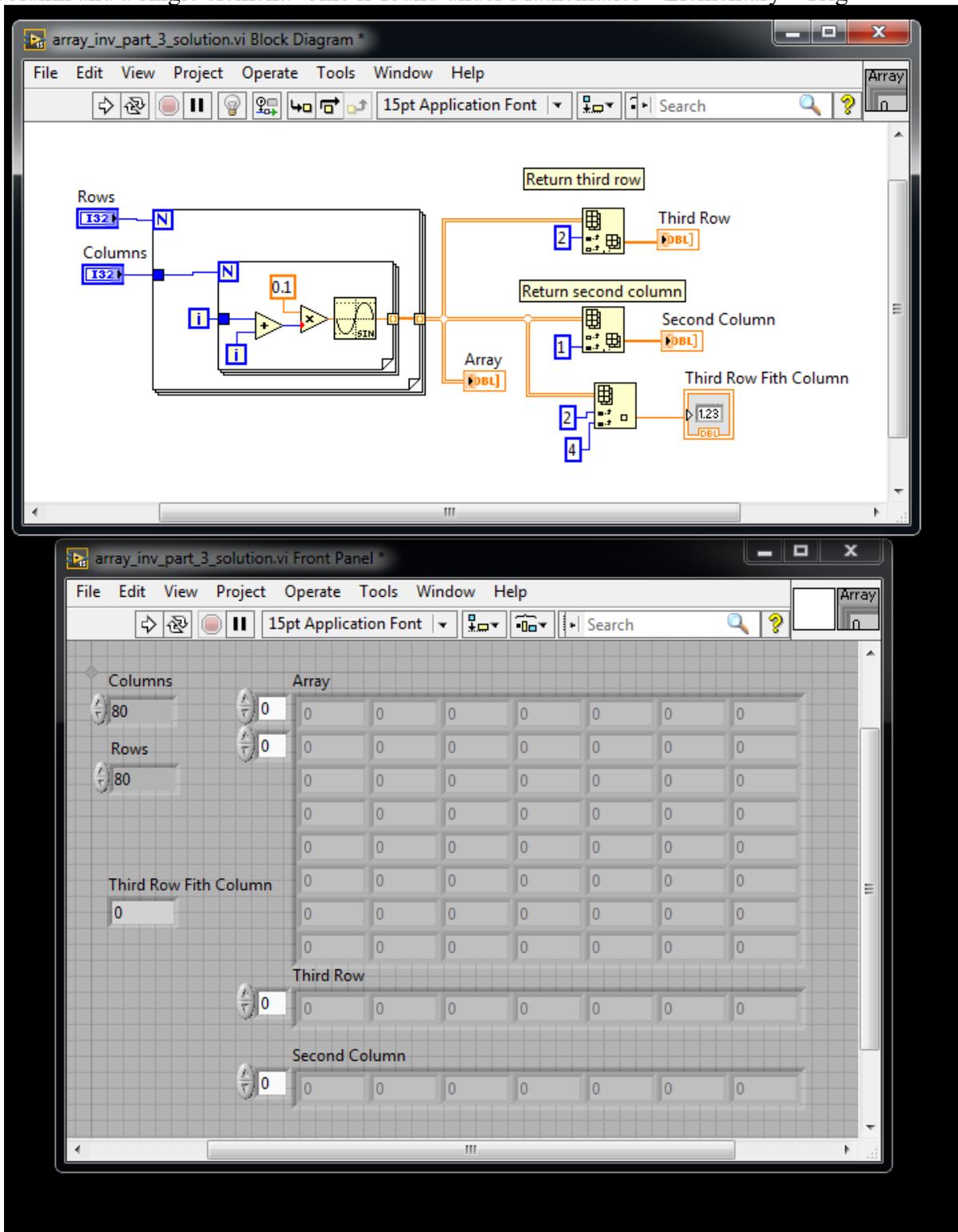
3. To give you an introduction to event structures, reproduce the VI demonstrated in the youtube video <https://www.youtube.com/watch?v=8eO64fo3Pho> . You do not need to demonstrate the initial “polling” VI. Just the event structure VI.



Read through the Array and Clusters Tutorial at <https://www.youtube.com/watch?v=rzOT1zXBDiE> and <https://www.youtube.com/watch?v=GIQ1riWjPc&list=PLB968815D7BB78F9C&index=8>

4. Then reproduce the following exercises:

See how a “for loop” can create a multidimensional array and use the Index Array to pull out a single row and single column and a single element. Sine is found under Mathematics->Elementary->Trig



5. Create a Cluster and then produce two Clusters similar to the first.

