

Lecture Notes #3 - 24/January/2012

What we covered in class:

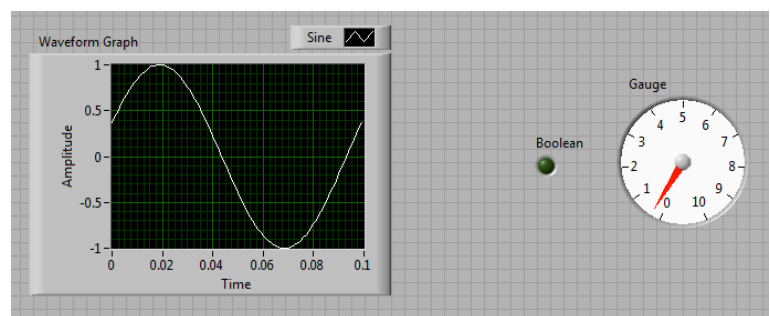
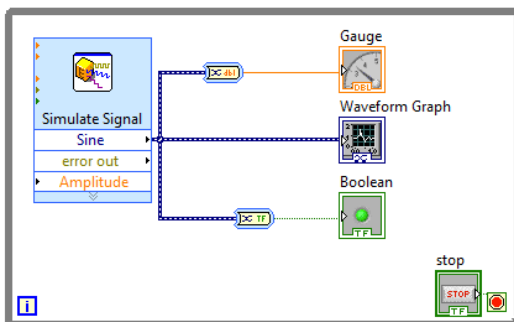
• Announcements:

- Announcement #1: students must sign up for a performance review next week. Signup sheets will be on advisor's office door.
 - Announcement #2: next class students must bring their DAQ boards.
- Went over the homework assigned on lecture #2.
- Reviewed virtual instrument and the programming environment.
- Introduced simulated signal and connected it to a waveform graph.
- See page 72 & 73 for more information
 - The simulated signal is in the "Block diagram tools" => Express menu => Signal analysis

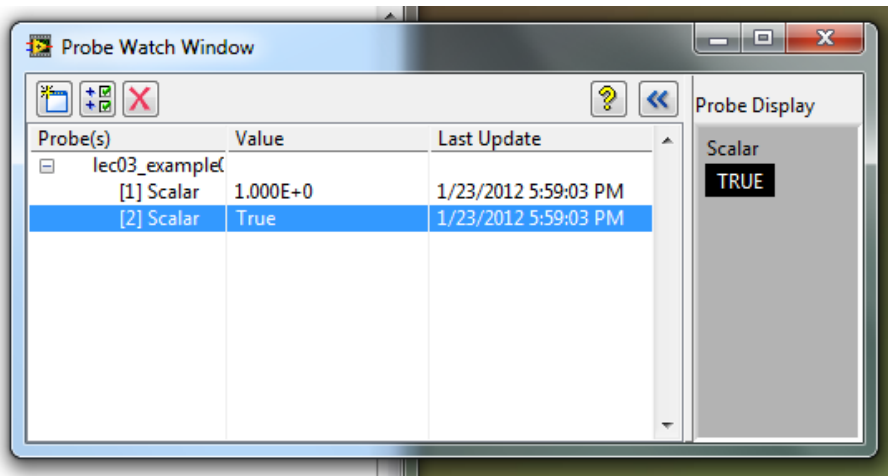


• Class activity #1:

- Use a knob to control the amplitude and offset of the simulated signal
- Introduced data types such as numeric, string, dynamic and boolean

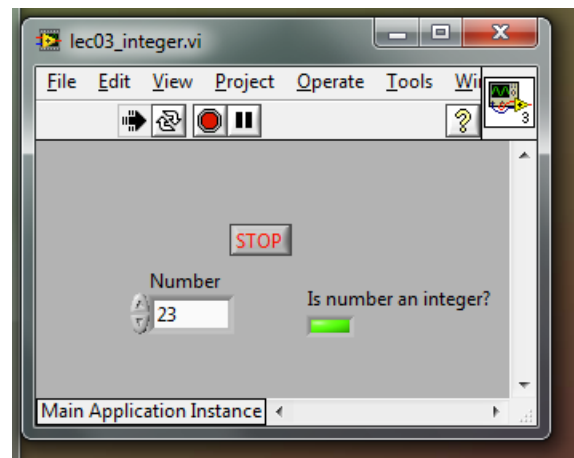
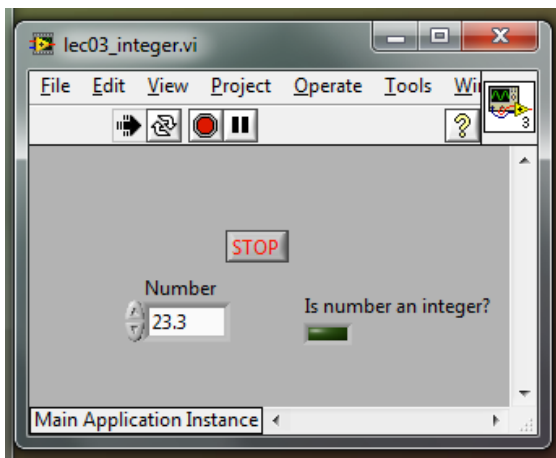


- Introduced probes.



Homework due next class:

- Note: Homework submitted after 8am on Jan. 27th will not be graded.
- Read pages 77-91.
- Problem #1: Design a virtual instrument (vi) which determines whether a number input on a floating point numeric control is an integer. A floating point number is one that contains a decimal-dot. For example; 23.3 is a floating point number, whereas 23 is an integer. You must place an LED on the front panel that lights whenever the number input is an integer. Submit your virtual instrument (vi) file to manhattan.



- Problem #2: Create a virtual instrument (vi) that takes in a temperature in Celsius and converts it into Fahrenheit. Choose the appropriate objects to use as input and output. Search for the conversion formula between these two temperature units on the internet. Submit your virtual instrument (vi) file to manhattan.