

Open and Run a Virtual Instrument (Slide 12)

Examine the **Signal Generation and Processing** VI and run it. Change the frequencies and types of the input signals and notice how the display on the graph changes. Change the Signal Processing Window and Filter options. After you have examined the VI and the different options you can change, stop the VI by pressing the Stop button.

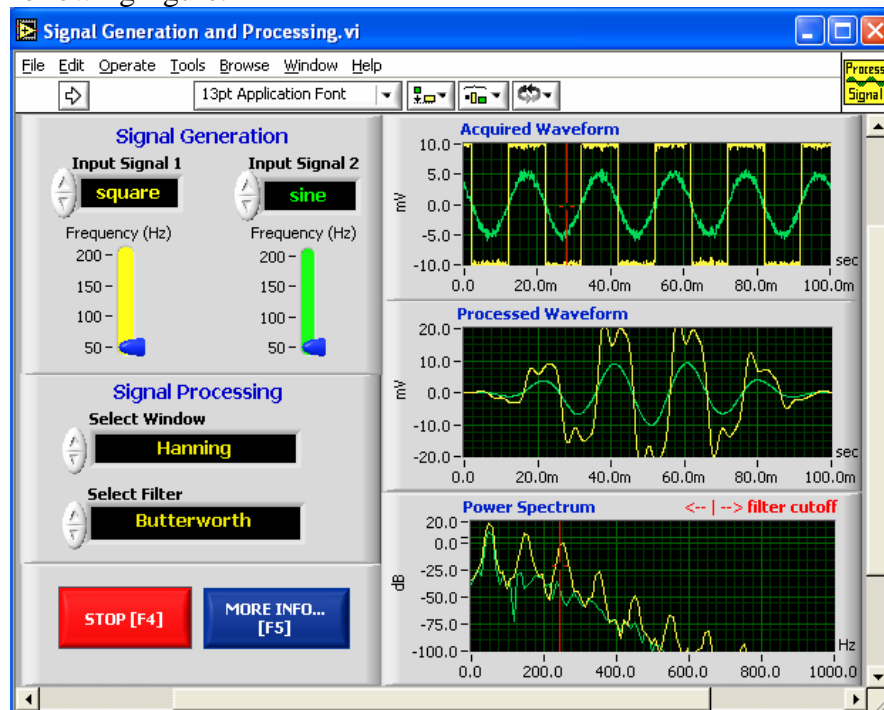
1. Select **Start»Programs»National Instruments»LabVIEW 7.0»LabVIEW** to launch LabVIEW. The **LabVIEW** dialog box appears.
2. Select **Help»Find Examples**. The dialog box that appears lists and links to all available LabVIEW example VIs.
3. On the Browse Tab, select browse according to task. Choose **Analyzing and Processing Signals**, then **Signal Processing**, then **Signal Generation and Processing.vi**.
This will open the Signal Generation and Processing VI Front Panel.

Note You also can open the VI by clicking the **Open VI** button and navigating to `labview\examples\apps\demos.llb\Signal Generation and Processing.vi`.

Front Panel



4. Click the **Run** button on the toolbar, shown at left, to run this VI. This VI determines the result of filtering and windowing a generated signal. This example also displays the power spectrum for the generated signal. The resulting signals are displayed in the graphs on the front panel, as shown in the following figure.





5. Use the Operating tool, shown at left, to change the Input Signal and the Signal Processing, use the increment or decrement arrows on the control, and drag the pointer to the desired Frequency.

6. Press the **More Info...** button or [F5] to read more about the analysis functions.

7. Press the **Stop** button or [F4] to stop the VI.

Block Diagram

8. Select **Window»Show Diagram** or press the <Ctrl-E> keys to display the block diagram for the Signal Generation and Processing VI.

(MacOS) Press the <Command-E> keys. **(Sun)** Press the <Meta-E> keys.

(Linux) Press the <Alt-E> keys.

This block diagram contains several of the basic block diagram elements, including subVIs, functions, and structures, which you will learn about later in this course.

9. Select **Window»Show Panel** or press the <Ctrl-E> keys to return to the Front Panel.

10. Close the VI and do not save changes.

End of Exercise