Concept: Exploring a VI

Goal

Identify the parts of an existing VI.
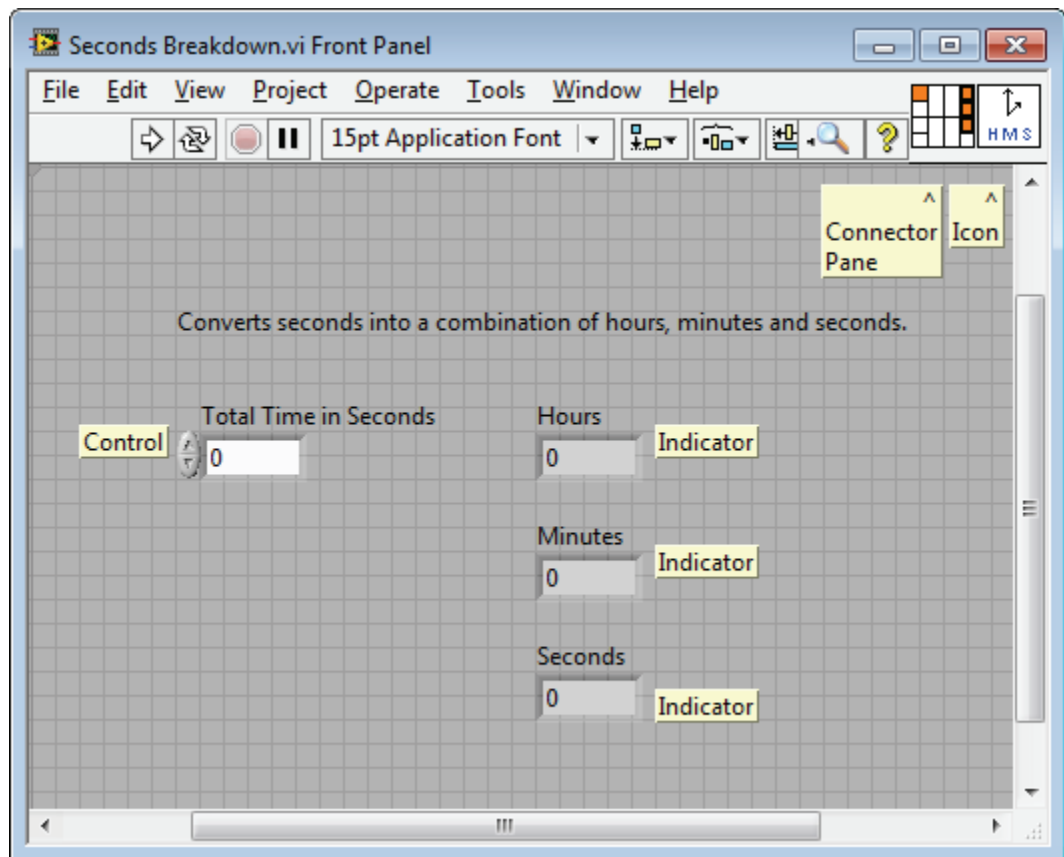
Description

You received a VI from an employee that takes the seconds until a plane arrives at an airport and converts the time into a combination of hours/minutes/seconds. You must evaluate this VI to see if it works as expected and can display the remaining time until the plane arrives.
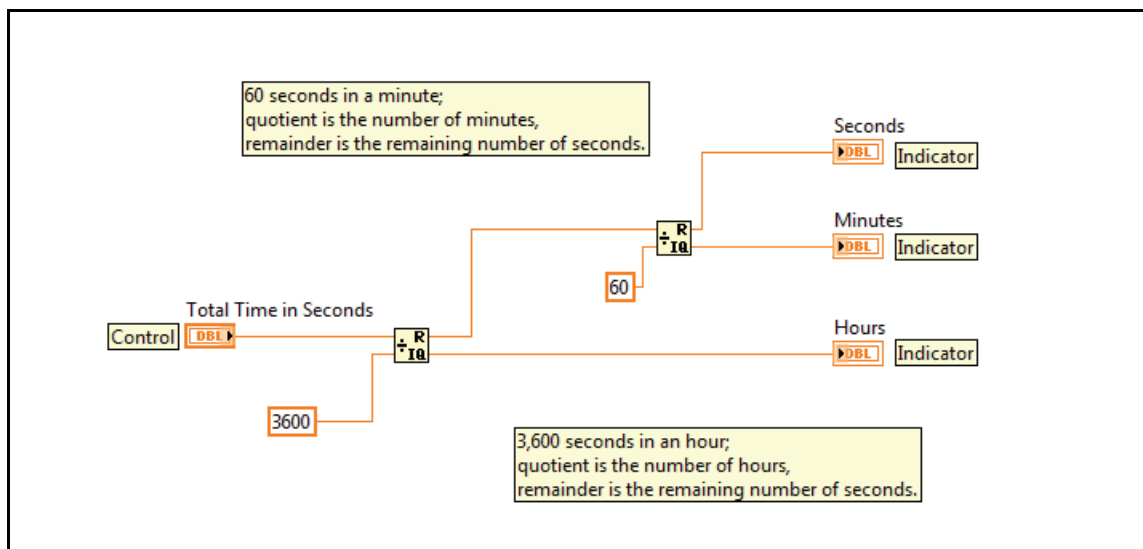
Implementation

The files that you need to complete this exercise are here: `<NI eLearning>\LV Core 1\VI_Parts of a LV Program\Exercise`.

1. Open `Seconds Breakdown.vi` from the provided VIs.

   ❑ Open LabVIEW.

   ❑ Select **File»Open**.

   ❑ Select `Seconds Breakdown.vi` from the `<Exercise>` directory and click **OK**.

2. On the front panel, identify the following items:

   ❑ Control

   ❑ Indicator

   ❑ Icon

   ❑ Connector Pane

3. To view the front panel and block diagram at the same time, select **Window»Tile Up and Down** or **Window»Tile Left and Right**.

4. On the block diagram, identify the following items:

   ❑ Control

   ❑ Indicator

To verify that you identified all items correctly see Figures 1 and 2.

Figure 1. Front Panel Items

Figure 2. Block Diagram Items

5. Test the VI using the values given in Table 1.

    ❑ Enter the input value in the **Total Time in Seconds** control.

    ❑ Click the **Run** button.

    ❑ For each input, compare the given outputs to the outputs listed in
       Table 1. If the VI works correctly, they should match.

Table 1. Testing Values for Seconds Breakdown.vi

Input	Output
0 seconds	0 hours, 0 minutes, 0 seconds
60 seconds	0 hours, 1 minute, 0 seconds
3600 seconds	1 hour, 0 minutes, 0 seconds
3665 seconds	1 hour, 1 minute, 5 seconds

End of Exercise

Notes