LabVIEW SubVIs

Sub VIs are very useful in LabVIEW. Using Sub VI helps you manage changes and debug the Block Diagram quickly. You can also easily reuse your code. SubVIs are equal to **functions** in text based languages.

Task 1: Create a simple SubVI

Create a SubVI that performs a linear scaling $y = ax + b$. Where $a, b\ and\ x$ are inputs, and y is an output.

The Procedure is as follows:

Step 1: Create a New VI (File → New VI) (Blank VI)

Step 2: Give the VI a Name (**Linear Scaling.vi**)

Step 3: Create your Front Panel with your necessary Controls and Indicators
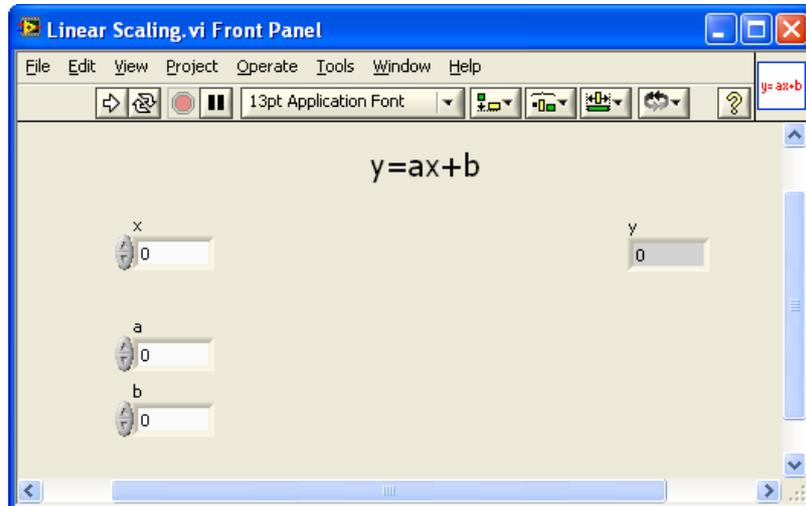
Step 4: Create your Block Diagram. The Block Diagram could look something like this:
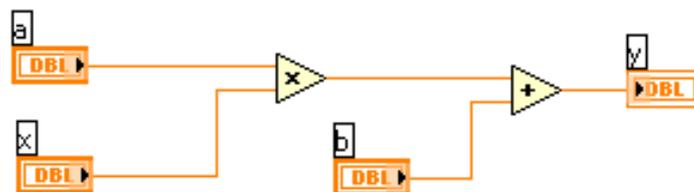
Step 5: Create the Input and Output Connectors. Right-click on the little icon in the upper right corner and select "Show Connector".
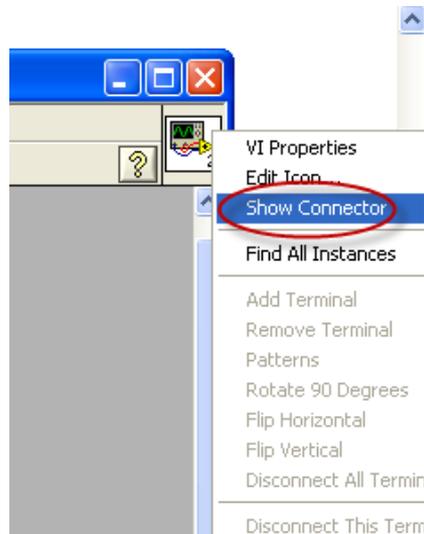
 Select the Wire tool and click on the wanted connector, then click on the Control or Indicator on the Front Panel you want to connect to this connector.

Step 6: Create an Icon using the Icon Editor. Right-click on the little icon in the upper right corner and select "Edit Icon…".
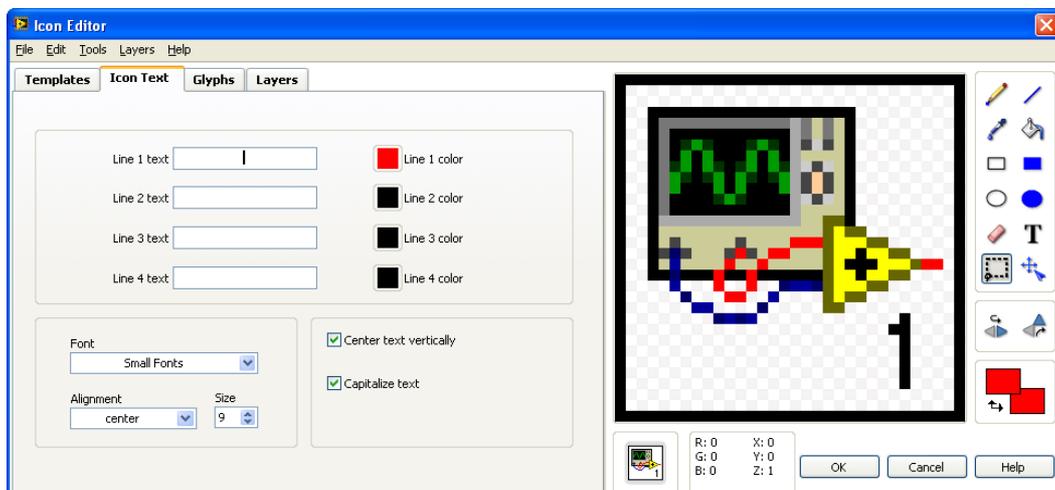
Step 7: Create a new VI that you use to test your Sub VI. Example: