



Using Tasks and Snippets in SAS Studio

Using Tasks

In addition to features that make writing SAS code easier, SAS Studio also includes powerful point-and-click tasks that quickly generate reports and graphs.

1. Select **Tasks** in the Navigation pane and then expand **Tasks**.

The screenshot shows the SAS Studio interface. On the left is the 'Files and Folders' pane with a 'Tasks' section expanded. The 'Tasks' section lists various categories: Data, Graph, Combinatorics and Probability, Statistics, High-Performance Statistics, Econometrics, Forecasting, and Data Mining. Below these are 'Utilities' (Import Data, Query, SAS Program), 'Snippets', 'Libraries', and 'File Shortcuts'. The main window displays a data table with columns: Obs, Make, Model, MPG_City, and MPG_Highway. The table contains 22 rows of data for various car models.

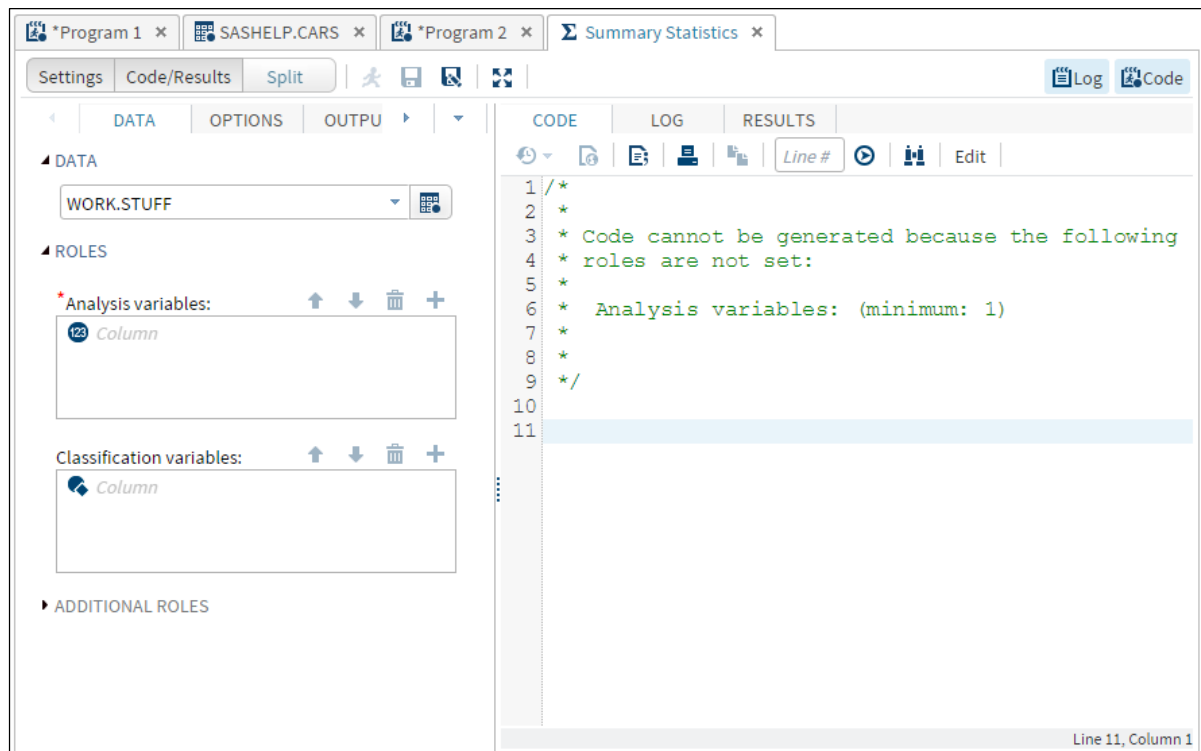
Obs	Make	Model	MPG_City	MPG_Highway
1	Acura	MDX	17	23
2	Acura	RSX Type S 2dr	24	31
3	Acura	TSX 4dr	22	29
4	Acura	TL 4dr	20	28
5	Acura	3.5 RL 4dr	18	24
6	Acura	3.5 RL w/Navigation 4dr	18	24
7	Acura	NSX coupe 2dr manual S	17	24
8	Audi	A4 1.8T 4dr	22	31
9	Audi	A4 1.8T convertible 2dr	23	30
10	Audi	A4 3.0 4dr	20	28
11	Audi	A4 3.0 Quattro 4dr manual	17	26
12	Audi	A4 3.0 Quattro 4dr auto	18	25
13	Audi	A6 3.0 4dr	20	27
14	Audi	A6 3.0 Quattro 4dr	18	25
15	Audi	A4 3.0 convertible 2dr	20	27
16	Audi	A4 3.0 Quattro convertible 2dr	18	25
17	Audi	A6 2.7 Turbo Quattro 4dr	18	25
18	Audi	A6 4.2 Quattro 4dr	17	24
19	Audi	A8 L Quattro 4dr	17	24
20	Audi	S4 Quattro 4dr	14	20
21	Audi	RS 6 4dr	15	22
22	Audi	TT 1.8 convertible 2dr (coupe)	20	28

Notice that the tasks are separated into the following categories based on the analysis:

- Data
- Graph
- Combinatorics and Probability
- Statistics
- High-Performance Statistics
- Econometrics
- Forecasting
- Data Mining

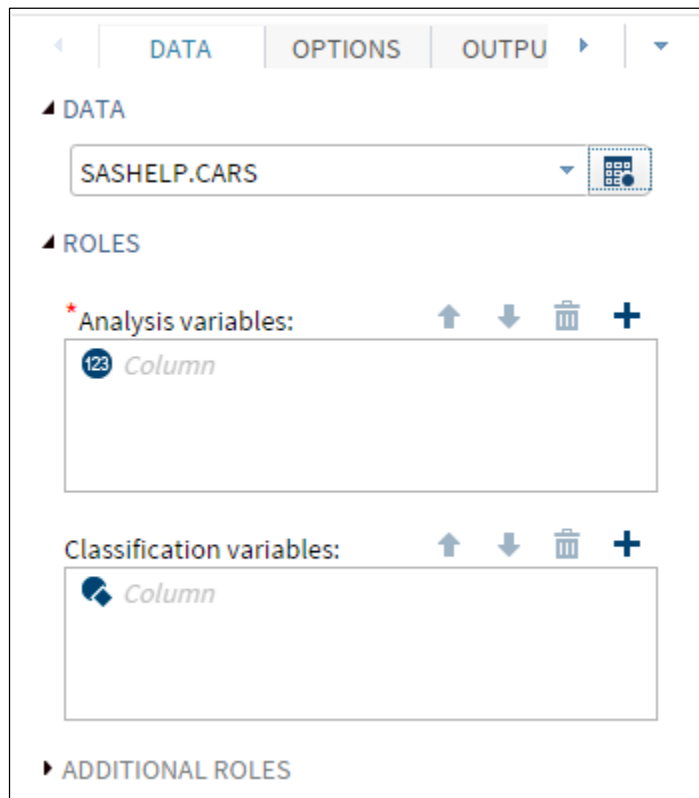
You can expand each node to view the possible tasks.

2. Expand the **Statistics** task and double-click the **Summary Statistics** task.

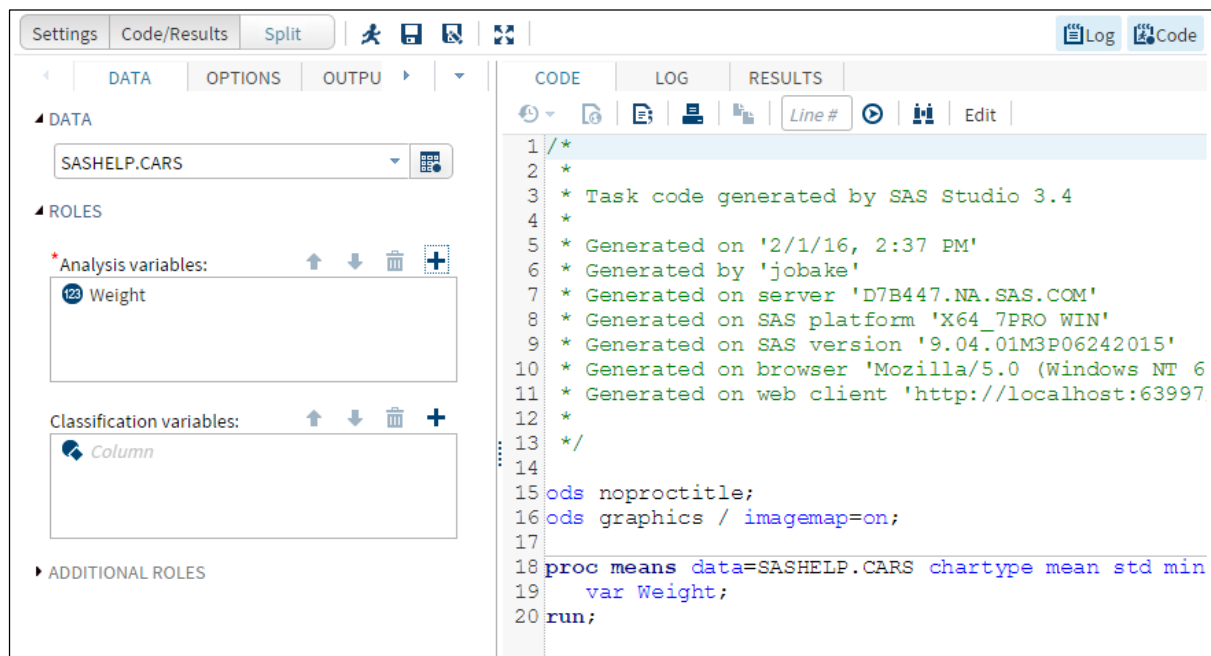


Notice that a new tab opens with the title Summary Statistics.

3. In the Data section, click the **Select a Table** button and navigate to the **cars** data set in the **Sashelp** library.

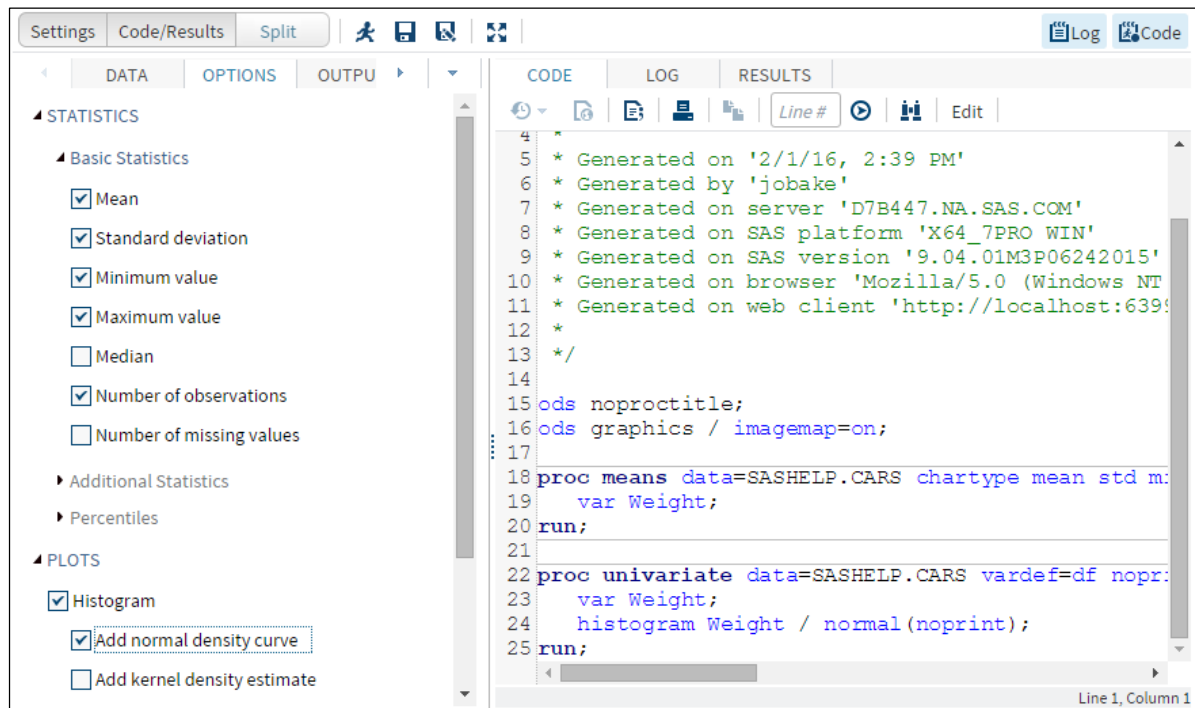


4. Click the **plus** symbol next to Analysis variables and select **Weight** as the analysis variable.



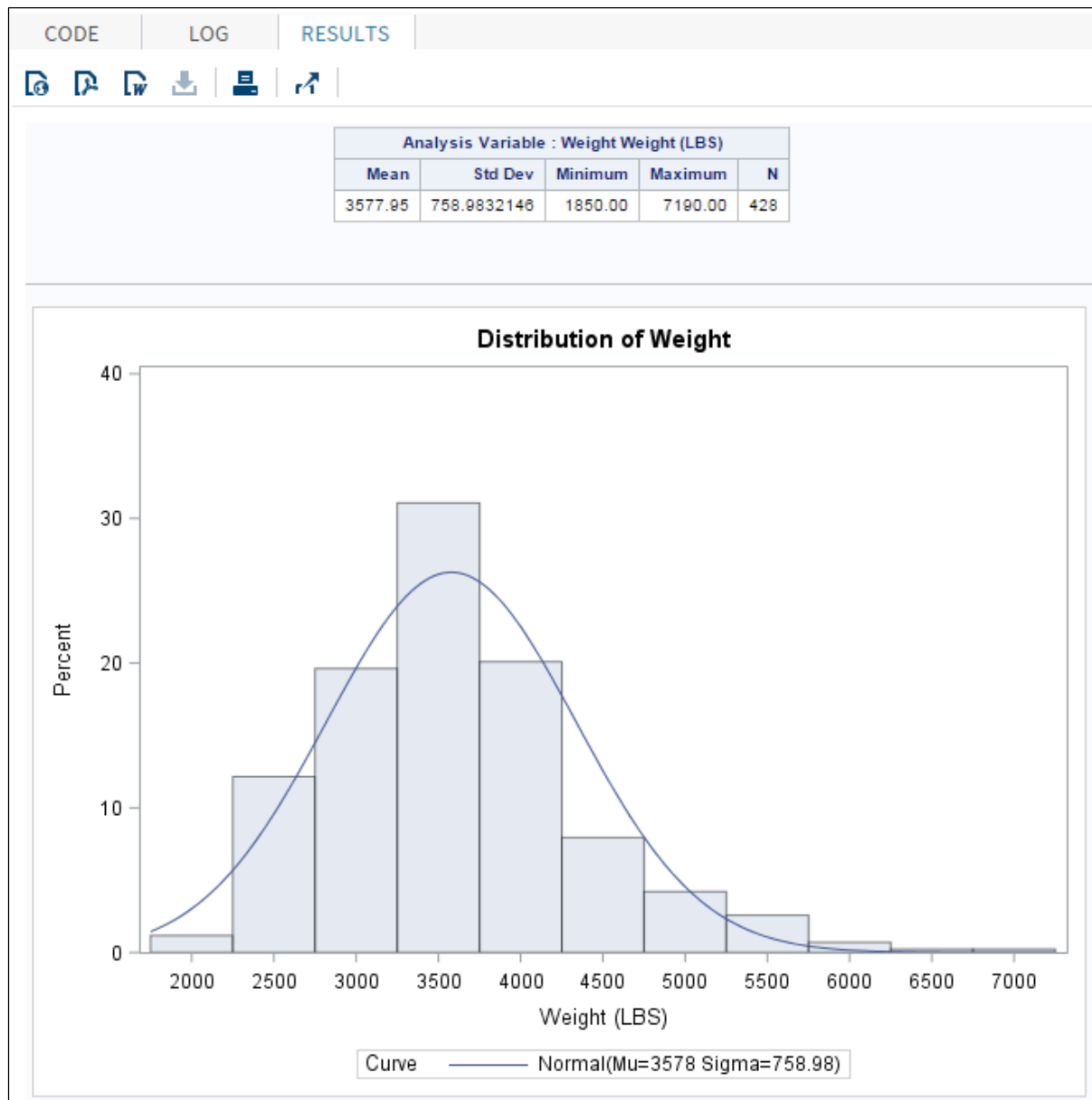
Notice that SAS Studio automatically generates the code for the MEANS procedure.

- Click the **OPTIONS** tab to specify which options you want to use. Ignore the Basic Statistics options. In the Plots section, select the **Histogram** and **Add normal density curve** check boxes to create statistical graphics.



Again, notice that SAS Studio automatically generates the code for the additional options.

6. Run the generated code and view the results.



The analysis is shown in a summary table and the plot is also printed on the Results page.

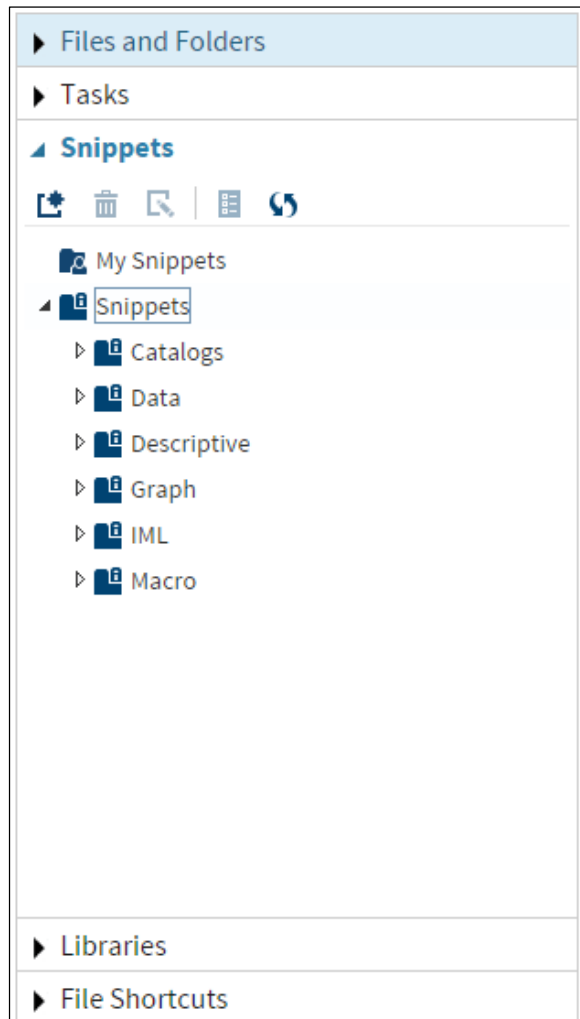


You can save the program by clicking the **Save** button on the toolbar or by copying and pasting the code into an existing program.

Using Snippets

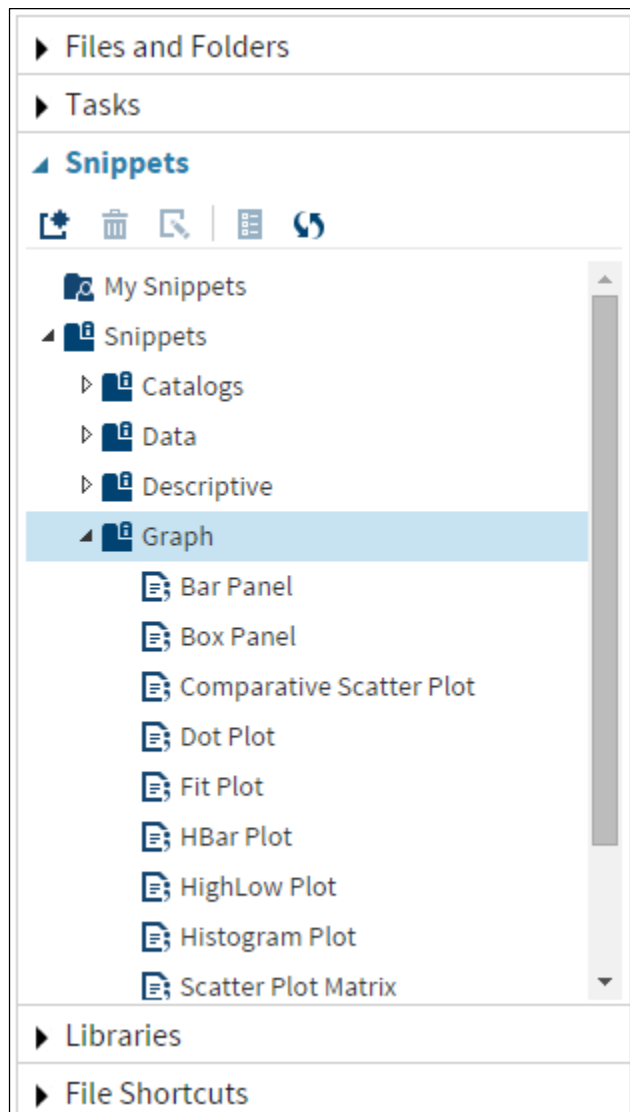
Code snippets enable you to quickly insert saved SAS code in your program and customize the code to meet your needs.

1. Open a new program tab by pressing **F4**.
2. In the Navigation pane, select **Snippets** and then expand the **Snippets** arrow.



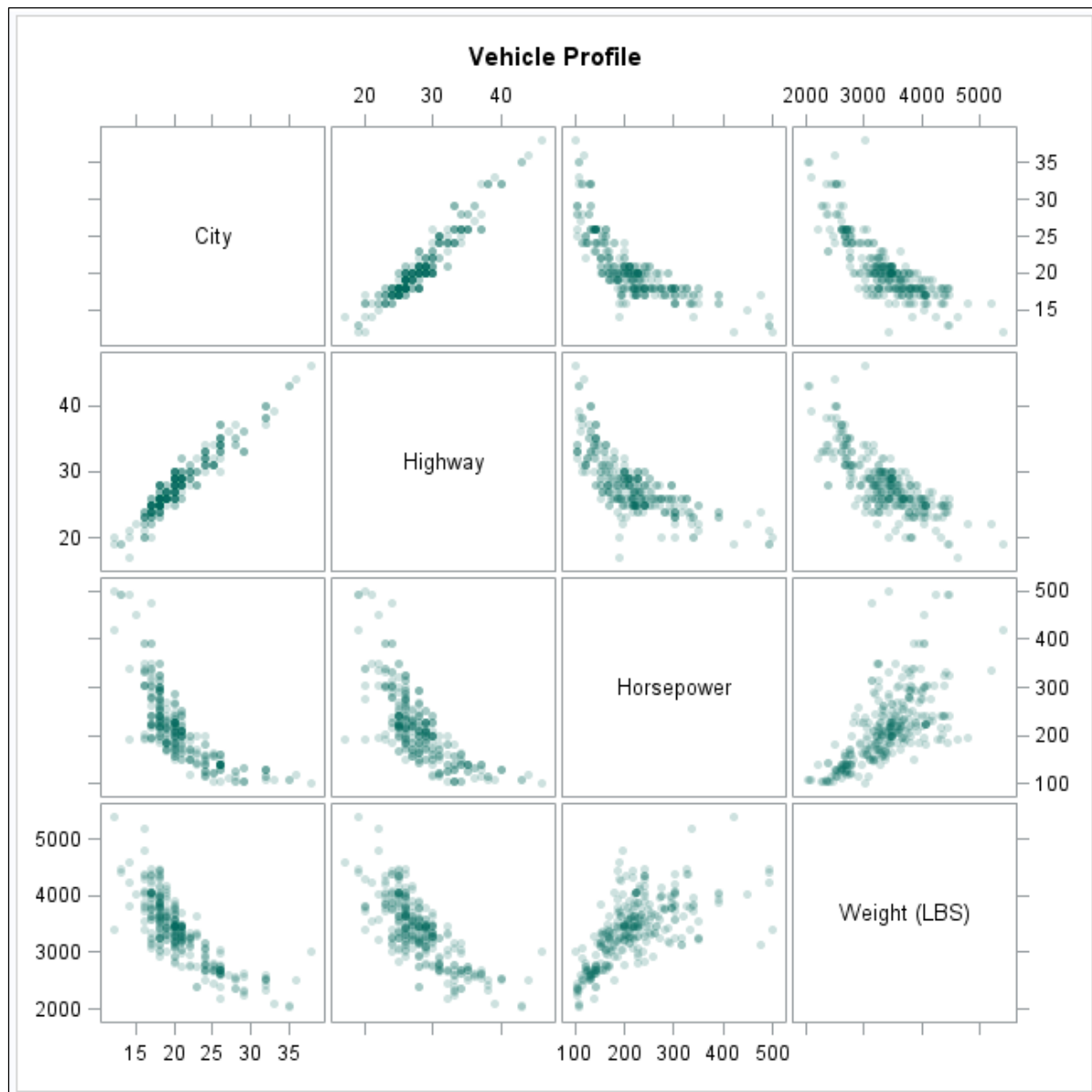
SAS Studio has the following snippet categories preloaded for the user:

- Catalogs
- Data
- Descriptive
- Graph
- IML
- Macro

3. Expand **Graph**.4. Drag and drop the **Scatter Plot Matrix** snippet into the program workspace. The following code is generated:

```
/*--Scatter Plot Matrix--*/  
  
title 'Vehicle Profile';  
proc sgscatter data=sashelp.cars(where=(type in ('Sedan' 'Sports')));  
  label mpg_city='City';  
  label mpg_highway='Highway';  
  matrix mpg_city mpg_highway horsepower weight /  
    transparency=0.8 markerattrs=graphdata3(symbol=circlefilled);  
run;
```

5. Click **Run** and view the results.



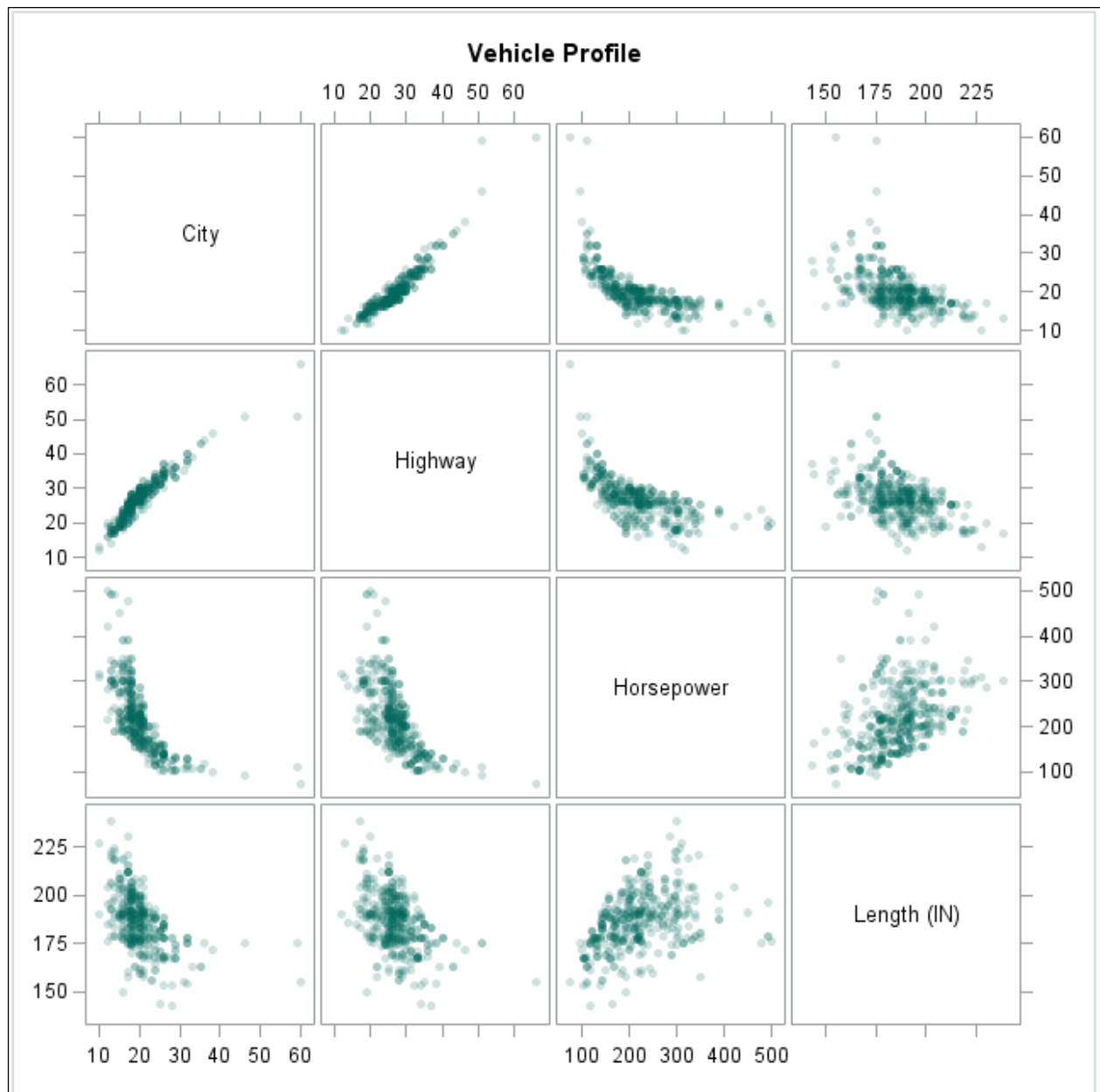
Generally, snippets are used as a starter program. Thus, the generated code can be altered to fit your needs.

6. Delete the WHERE option and change the **Weight** variable to the **Length** variable.

```
/*--Scatter Plot Matrix--*/

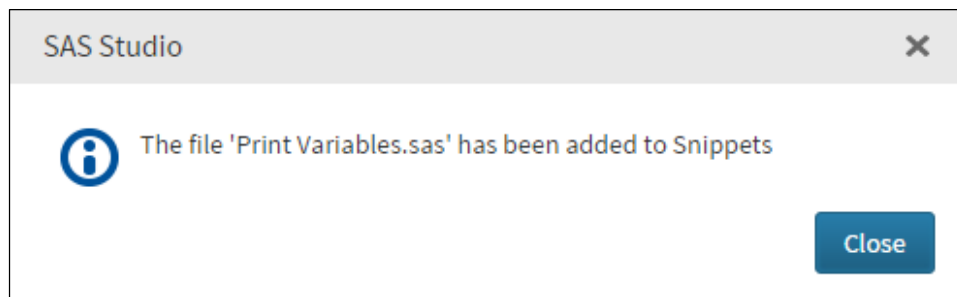
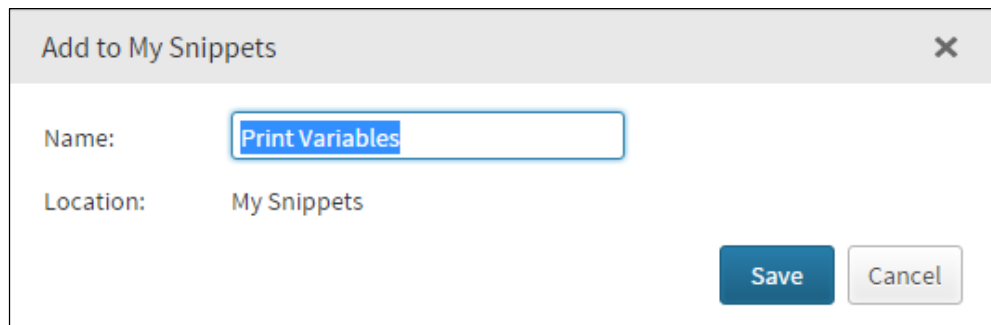
title 'Vehicle Profile';
proc sgscatter data=sashelp.cars;
  label mpg_city='City';
  label mpg_highway='Highway';
  matrix mpg_city mpg_highway horsepower length /
    transparency=0.8 markerattrs=graphdata3(symbol=circlefilled);
run;
```


7. Click **Run** and view the results.



8. Create your own snippet by clicking the **New Snippet** button in the Snippets pane.
9. Copy and paste the SAS code from the Program 2 tab onto the Snippet 1 tab.
10. Click **Save** on the Snippet 1 tab.

11. In the Add to My Snippets window, type **Print Variables** and click **Save**.



Notice that the My Snippets section now has the Print Variables snippet, which the user can drag and drop onto any SAS Studio Program tab at his convenience.

