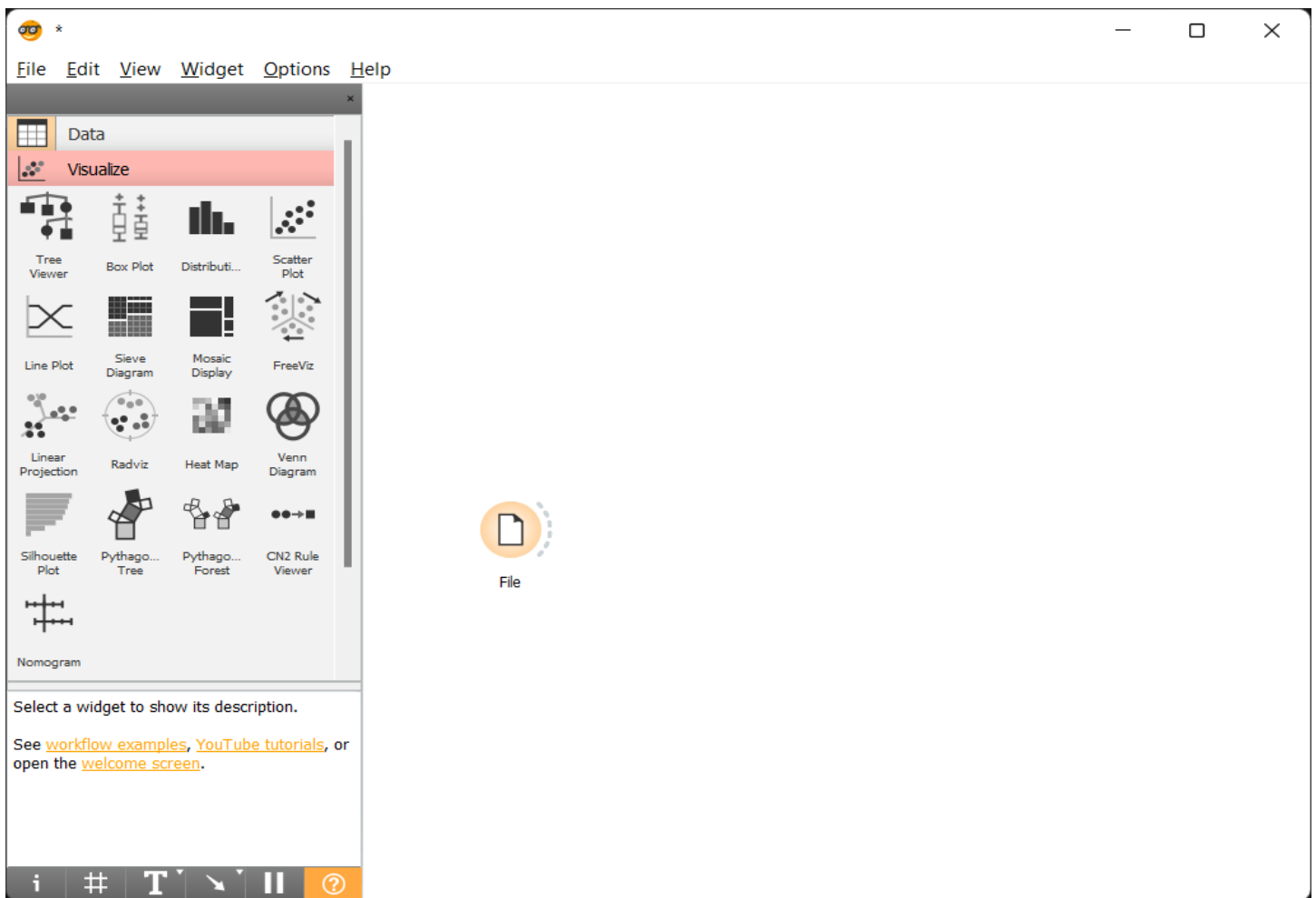


DWDM Mini Project

Aim: Perform hierarchical clustering and classification tree on the “Iris” dataset in Orange

Steps:

1. Drag and drop the ‘File’ icon from the left Data pane onto the page.



2. Double click the 'File' widget you just dropped on the screen. You should see this window.

File

File: iris.tab

...

Reload

URL:

Info

Iris flower dataset
Classical dataset with 150 instances of Iris setosa, Iris virginica and Iris versicolor.

150 instance(s)
4 feature(s) (no missing values)
Classification; categorical class with 3 values (no missing values)
0 meta attribute(s)

Columns (Double click to edit)

	Name	Type	Role	Values
1	sepal length	N numeric	feature	
2	sepal width	N numeric	feature	
3	petal length	N numeric	feature	
4	petal width	N numeric	feature	
5	iris	C categorical	target	Iris-setosa Iris-versic

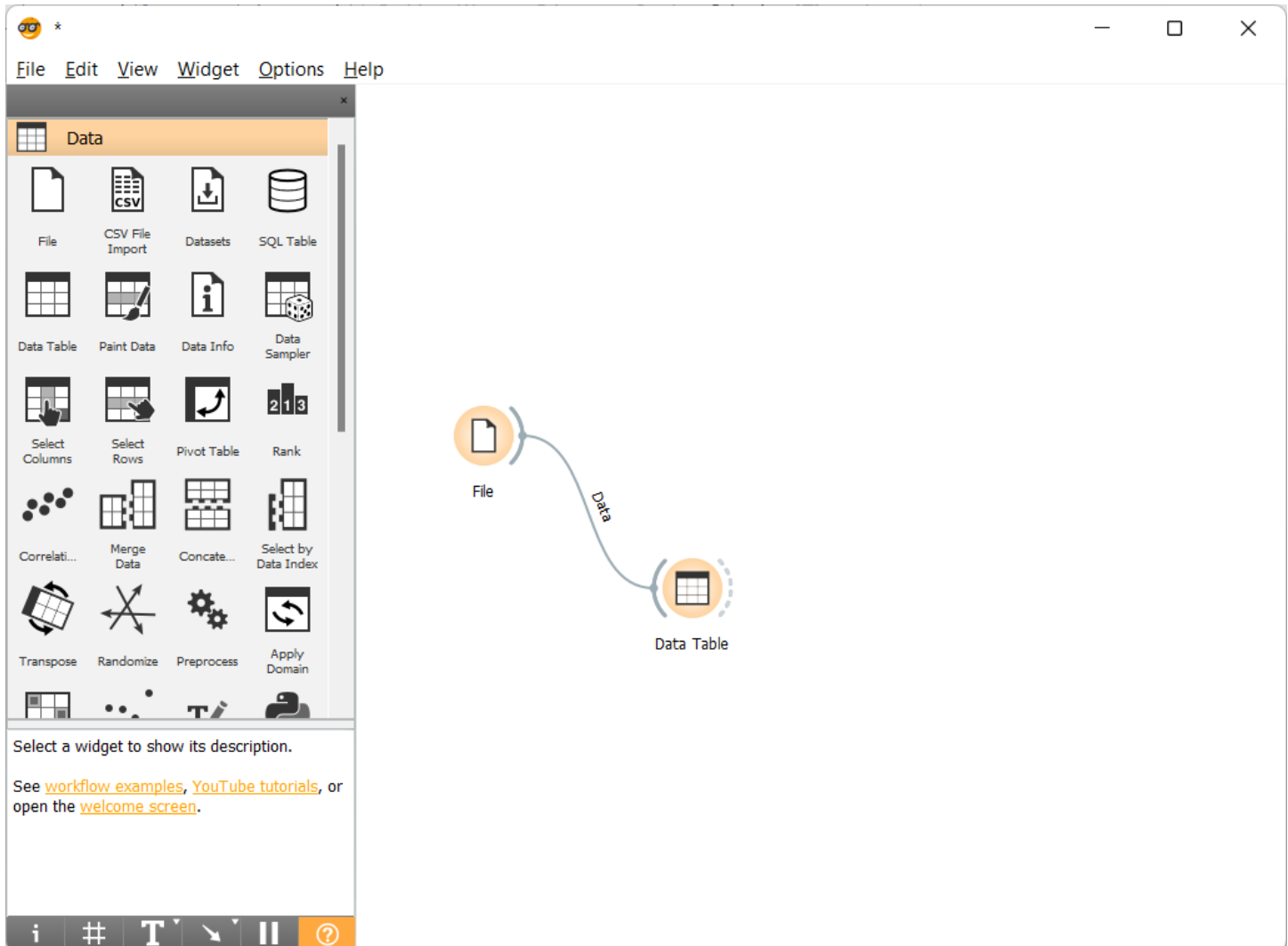
Browse documentation datasets

Reset

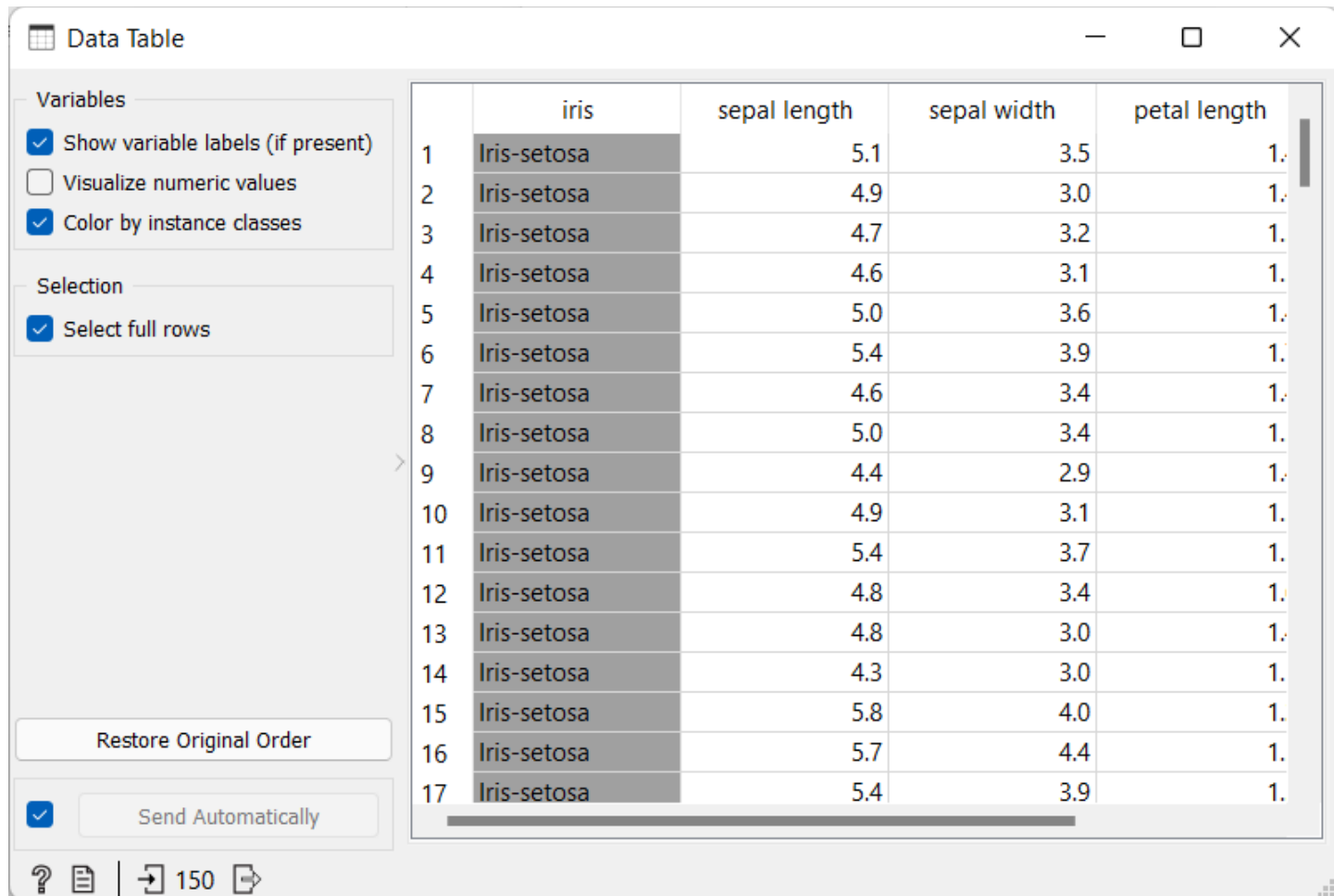
Apply

? | 150

- Now, select the 'Iris.tab' dataset from the drop down list and close the window. Now, drag and drop the 'Data Table' widget onto the screen. Now connect the 'File' widget to the 'Data Table' widget.



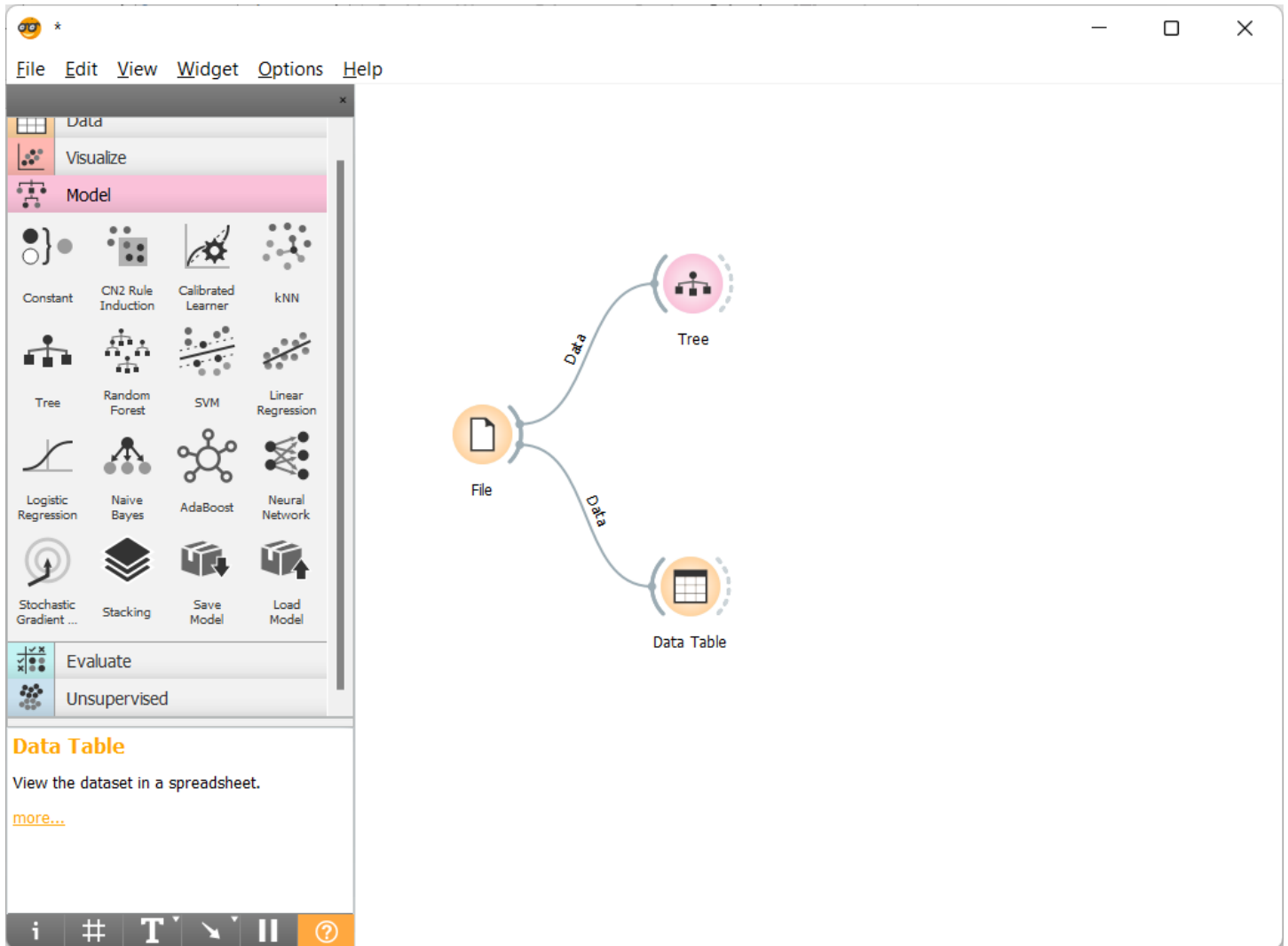
4. Now, double click the 'Data Table' widget to generate this window.



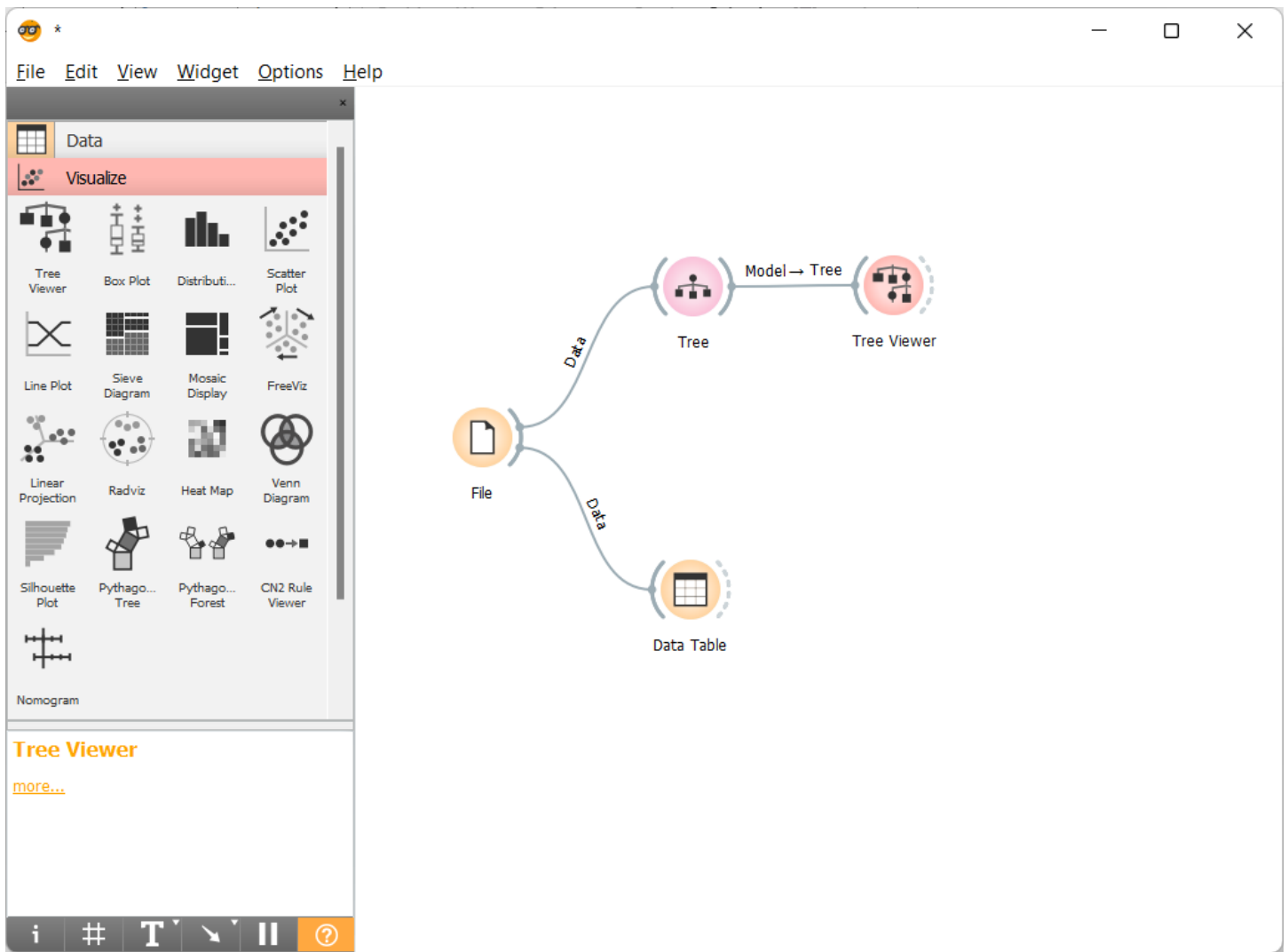
The screenshot shows a 'Data Table' window with a sidebar on the left containing configuration options and a main table area. The sidebar includes sections for 'Variables' and 'Selection'. The 'Variables' section has three checkboxes: 'Show variable labels (if present)' (checked), 'Visualize numeric values' (unchecked), and 'Color by instance classes' (checked). The 'Selection' section has one checkbox: 'Select full rows' (checked). Below these sections are buttons for 'Restore Original Order' and 'Send Automatically' (checked). At the bottom of the sidebar are icons for help, list, and a refresh icon with the number '150'. The main table area displays a table with 17 rows and 5 columns. The columns are labeled 'iris', 'sepal length', 'sepal width', and 'petal length'. The 'iris' column contains the value 'Iris-setosa' for all rows. The other columns contain numeric values. The table is scrollable, as indicated by a vertical scrollbar on the right and a horizontal scrollbar at the bottom.

	iris	sepal length	sepal width	petal length
1	Iris-setosa	5.1	3.5	1.4
2	Iris-setosa	4.9	3.0	1.4
3	Iris-setosa	4.7	3.2	1.3
4	Iris-setosa	4.6	3.1	1.5
5	Iris-setosa	5.0	3.6	1.4
6	Iris-setosa	5.4	3.9	1.4
7	Iris-setosa	4.6	3.4	1.3
8	Iris-setosa	5.0	3.4	1.5
9	Iris-setosa	4.4	2.9	1.4
10	Iris-setosa	4.9	3.1	1.5
11	Iris-setosa	5.4	3.7	1.5
12	Iris-setosa	4.8	3.4	1.3
13	Iris-setosa	4.8	3.0	1.3
14	Iris-setosa	4.3	3.0	1.2
15	Iris-setosa	5.8	4.0	1.6
16	Iris-setosa	5.7	4.4	1.5
17	Iris-setosa	5.4	3.9	1.4

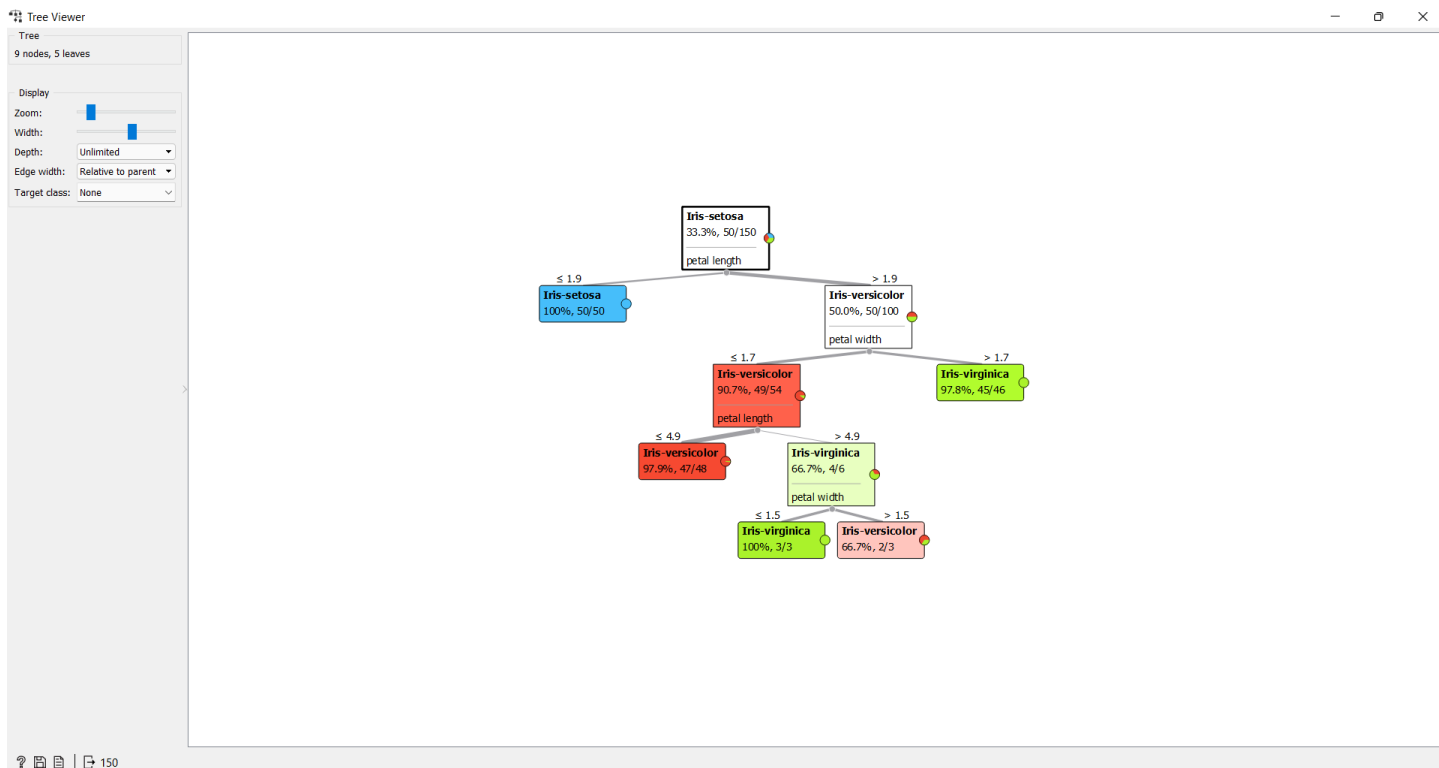
5. Now, drag and drop the 'Tree' widget. It can be found in the 'Model' section. Now connect the 'File' widget to the 'Tree' widget.



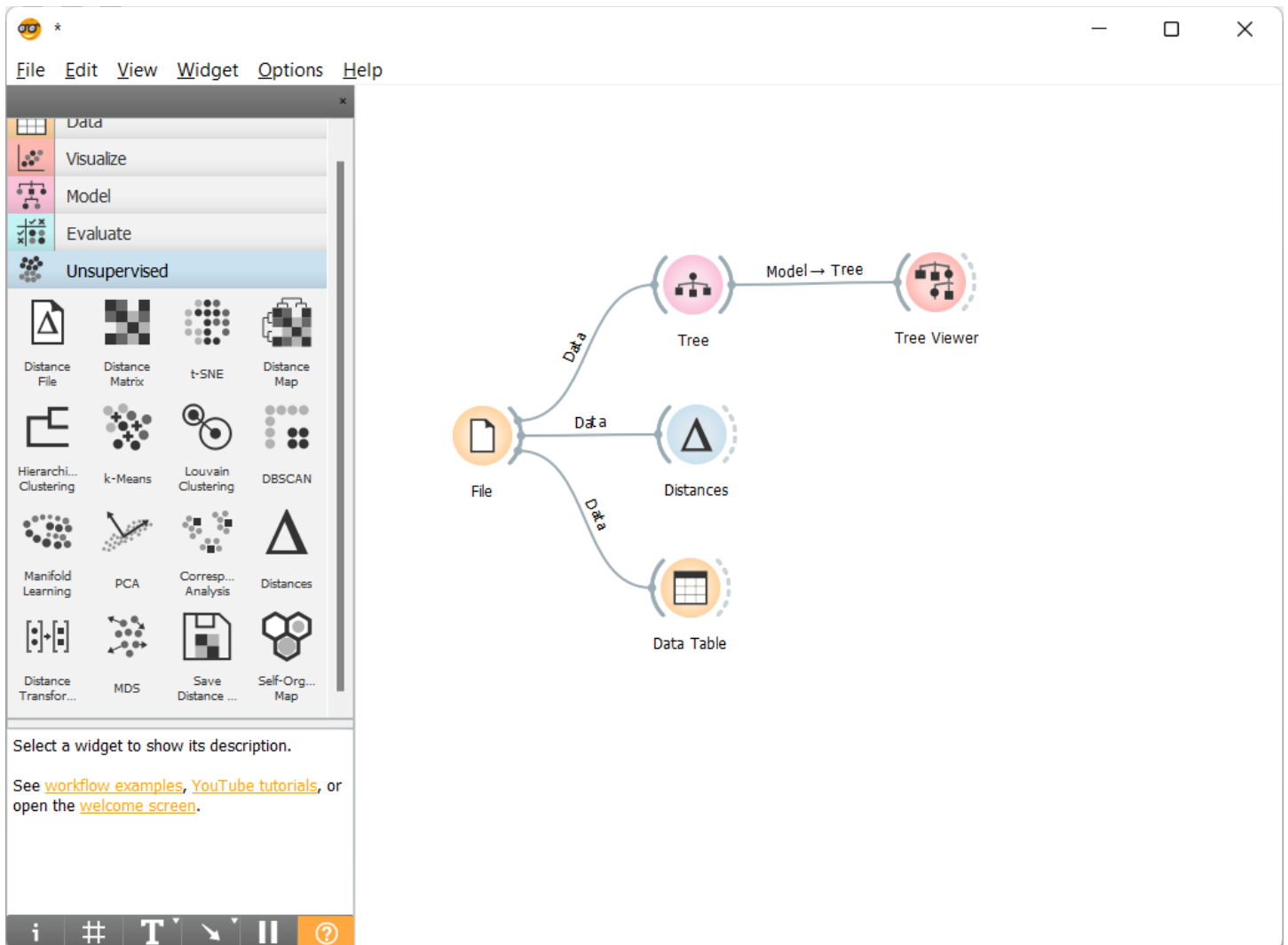
6. Drag and drop the 'Tree Viewer' widget to the screen. It can be found in the 'Visualize' section. Now connect the 'Tree' widget to the 'Tree Viewer' widget.



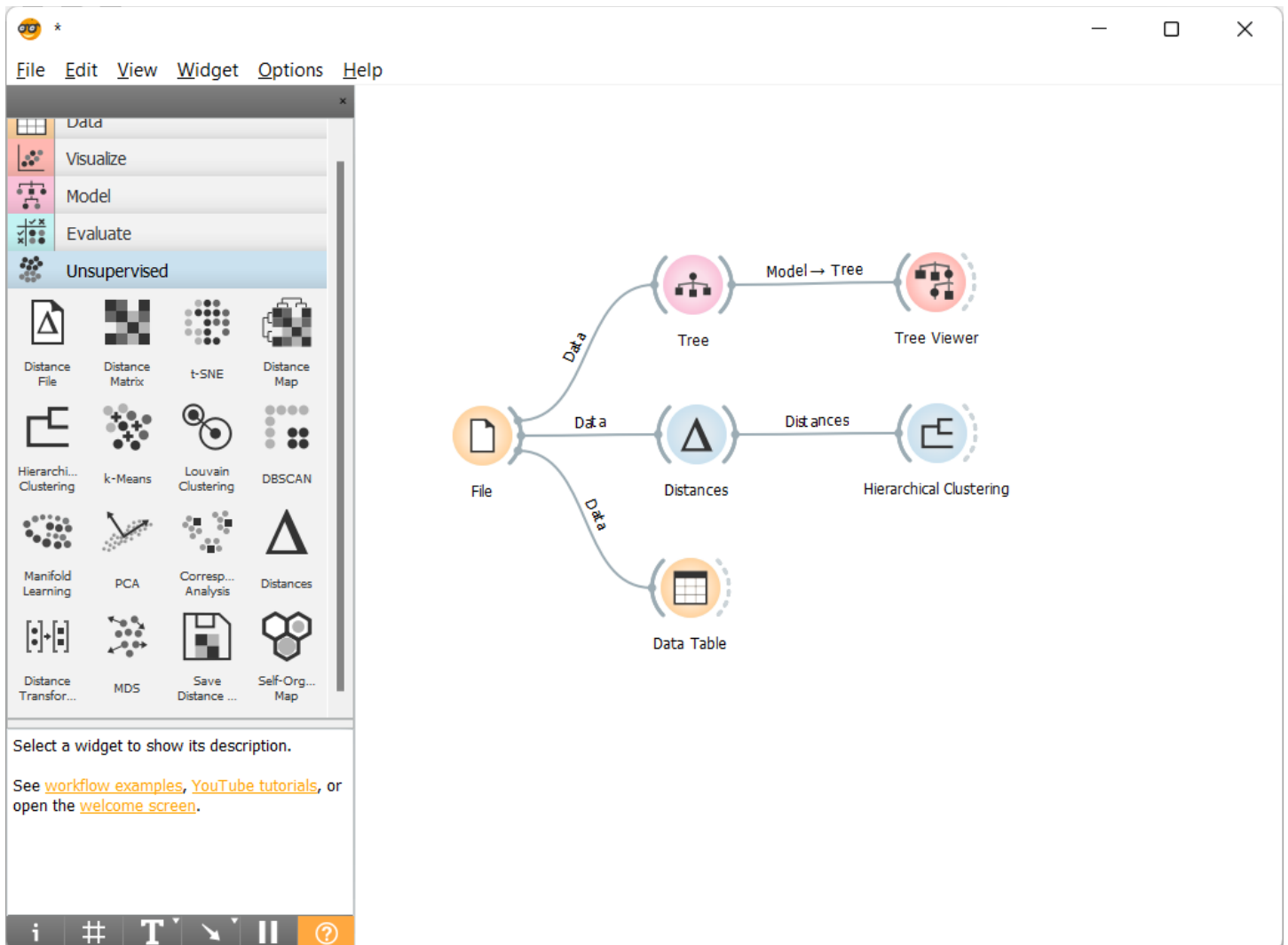
7. Now, double click the ‘Tree Viewer’ widget to display the tree.



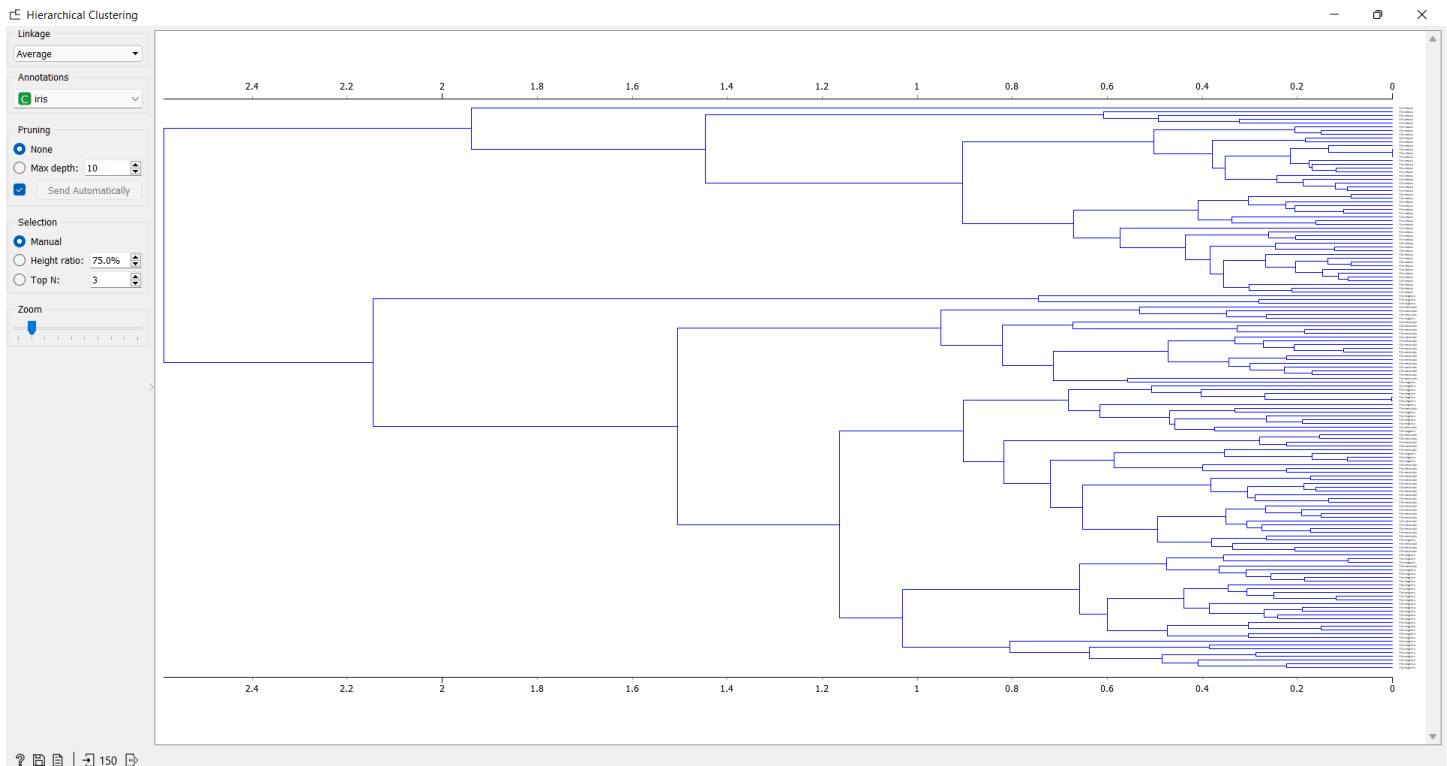
8. Now, drag and drop the 'Distances' widget from the 'Unsupervised' section to the screen. Connect the 'File' widget to the 'Distances' widget.



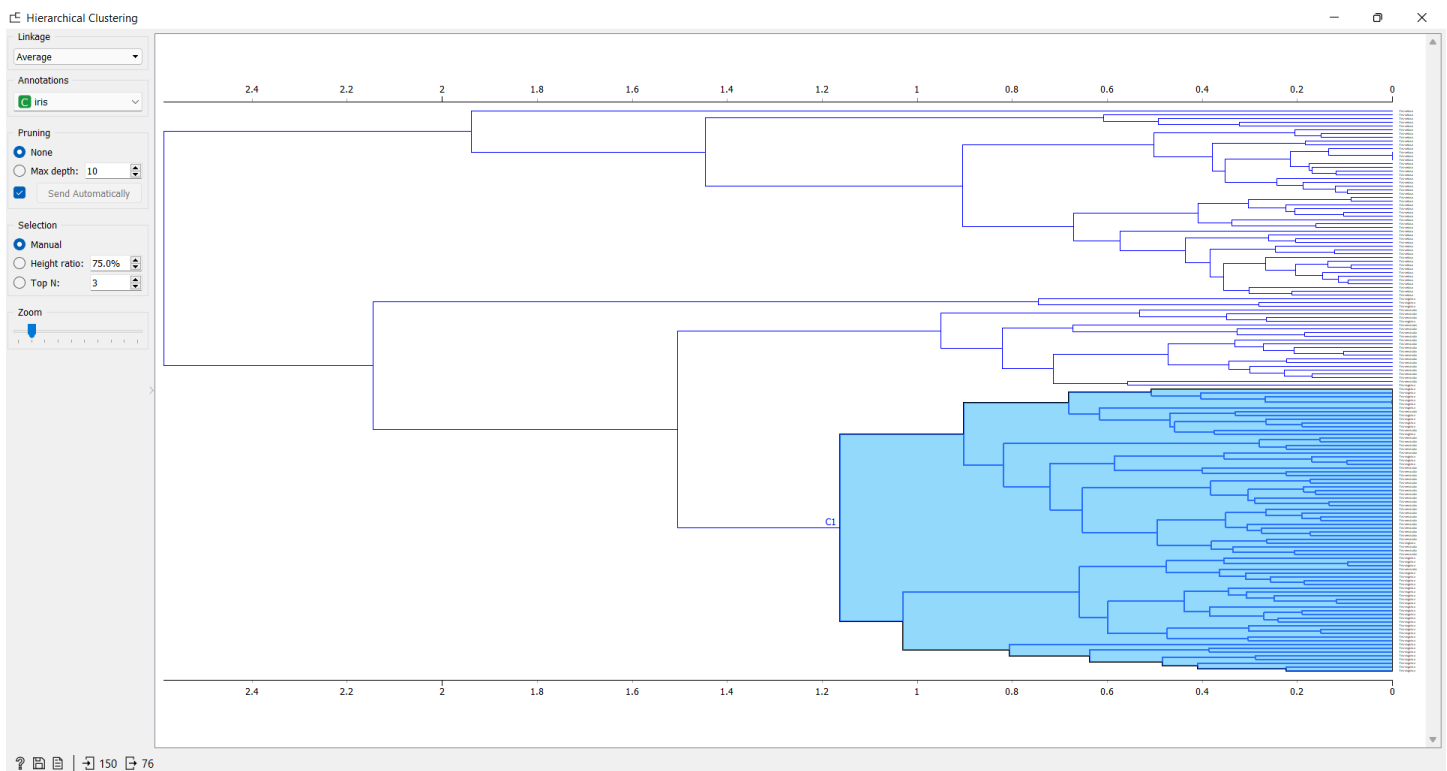
9. Also drag and drop the 'Hierarchical Clustering' widget from the 'Unsupervised' section to the screen. Connect the 'Distances' widget to the 'Hierarchical Clustering' widget



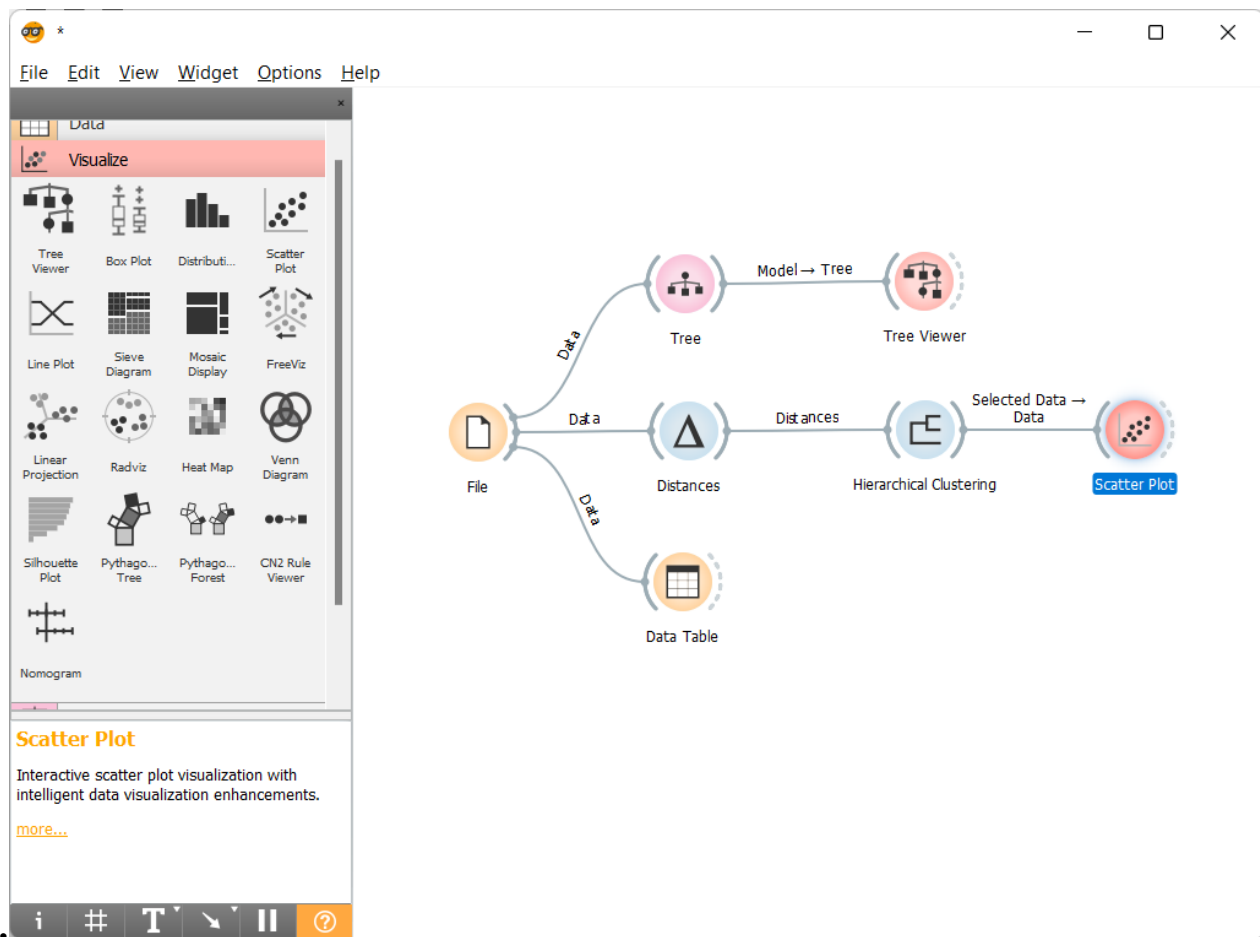
10. Now, double click the 'Hierarchical Clustering' widget to see this window



11. Now, select a part of the cluster and click it.



12. Drag and drop the 'Scatter Plot' widget from the 'Visualize' section to the screen. Connect the 'Hierarchical Clustering' widget to the 'Scatter Plot' widget.



13.

14. Now, double click the ‘Scatter Plot’ widget to view the plot

