

1. The built-in mtcars dataset was extracted from the 1974 *Motor Trend* US magazine, and comprises fuel consumption and 10 aspects of automobile design and performance for 32 automobiles (1973–74 models). Use this dataset in the following exercises.
 - (1) Create a directed igraph network and plot this graph object.
 - (2) Compute the hierarchical clustering. Use scale() function in order to an enhanced hierarchical clustering.
Then Visualize the result as a dendrogram for 4 clusters.
 - (3) Create a Reingold-Tilford Tree network diagram with radialNetwork() in the networkD3 package.
 - (4) Create a Reingold-Tilford Tree network diagram with diagonalNetwork() in the networkD3 package.
 - (5) Visualize a dendrogram with dendroNetwork() in the networkD3 package. Use the four different text colors ("red", "magenta", "blue", "green").