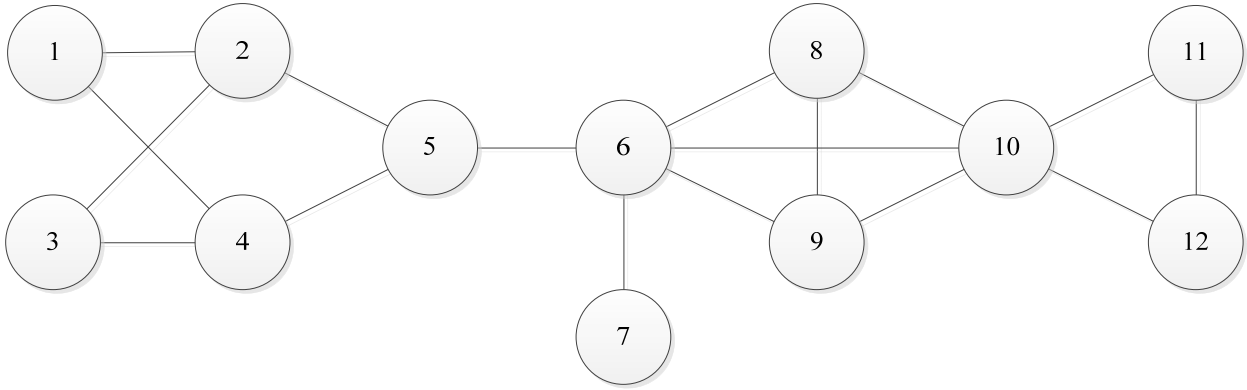# Cut Vertices example in SAS

This example defines the graph below inside the SAS code and uses the biconcomp call to determine the set of cutvertices. The cutvertex classification is written to the file cut_vertex_set.


```
data cut_vertices_example;
input from $ to $ ;
datalines;
1 2
1 4
2 3
2 5
3 4
4 5
5 6
6 7
6 8
6 9
6 10
8 9
8 10
9 10
10 11
10 12
11 12
;
 proc optgraph
 data_links = cut_vertices_example
 out_nodes = cut_vertex_set;
 biconcomp;
 run;
```