Topological sorting using DFS algorithm : G :

DAG.

1,2,4,3
1,4,2,3.

calls	x,y	inProcess	fullyProcessed	sorted	ok
initialization		{ }	{ }	[ ]	
TopoSortDFS(G, 1, [ ], { }, { })	x = 1	{ } {1} {1}	{ } {1}	[ ] [1]	 true
TopoSortDFS(G, 2, {1}, {1}, { })	x = 2 y = 1	{1} {1,2} {1}	{1} {1,2}	[1] [1,2]	 true
TopoSortDFS(G, 3, {1,2}, {1,2}, { })	x = 3 y = 2 y = 4	{1} {3}	{1,2}	[1,2]	
TopoSortDFS(G, 4, {1,2}, {1,2}, {3})	x = 4 y = 1 x = 3	{3} {3,4} {3,4} {3} { }	{1,2} {1,2,4} {1,2,4,3}	[1,2] [1,2,4] [1,2,4,3]	 true true

topological order.