



Input file for the following graph :

8 12
0 4 5
0 3 12
1 3 3
1 2 7
4 6 7
3 6 8
3 7 5
3 2 1
2 7 11
7 6 5
6 5 11
7 5 4

Calls	X,Y	currently_visiting	visited	sorted	status
initialization		{ }	{ }	[]	
、	X = 0	{0}	{ }	[]	True
		{ }	{0}	[0]	
depth_first_search(1, [0], {0}, {})	X = 1	{1}	{0}	[0]	True
		{ }	{0,1}	[0,1]	
depth_first_search(2, [0, 1], {0, 1}, {})	X = 2	{2}	{0,1}	[0,1]	True
	Y = 1				
	Y = 3	{2}			
		{2}	{0,1,3}	[0,1,3]	
		{ }	{0,1,2,3}	[0,1,3,2]	
depth_first_search(3, [0, 1], {0, 1}, {2})	X = 3	{2,3}	{0,1}	[0,1]	True
	Y = 0				
	Y = 1				

depth_first_search(4, [0, 1, 3, 2], {0, 1, 2, 3}, {})	X = 4	{4}	{0,1,2,3}	[0,1,3,2]	True
	Y = 0	{}	{0,1,2,3,4}	[0,1,3,2,4]	
depth_first_search(5, [0, 1, 3, 2,4], {0, 1, 2, 3,4}, {})	X = 5	{5}	{0,1,2,3,4}	[0,1,3,2,4]	True
	Y = 6	{5}			
	Y = 7	{5}	{0,1,2,3,4,6,7}	[0,1,3,2,4,7]	
		{}	{0,1,2,3,4,5,6,7}	[0,1,3,2,4,7,6,5] This is the topological order	
depth_first_search(6, [0, 1, 3, 2,4], {0, 1, 2, 3,4}, {5})	X = 6	{5,6}	{0,1,2,3,4}	[0,1,3,2,4]	True
	Y = 3				
	Y = 4				

	Y = 7	{5,6}	{0,1,2,3,4,7}		
		{5}	{0,1,2,3,4,6,7}	[0,1,3,2,4,7,6]	
depth_first_search(7, [0, 1, 3, 2, 4],	X = 7	{5,6,7}	{0,1,2,3,4,6}	[0,1,3,2,4,6]	True
{0,1,2,3,4}, {5,6})	Y = 2				
	Y = 3				
		{5,6}	{0,1,2,3,4,7}	[0,1,3,2,4,7]	