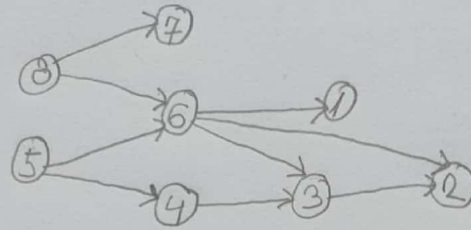


Topological sorting using DFS algorithm:

DAG



calls	x, y	in-process	fully-processed	sorted	ok
initialization		{ }	{ }	[]	
top-sort-DFS(0, [], { }, { })	x=0	{ }	{ }	[]	
		{0}	{0}	[0]	true
		{ }	{0}	[0]	
top-sort-DFS(1, [0], {0}, { })	x=1 y=6	{1}	{0}	[0]	
top-sort-DFS(6, [0], {0}, {1})	x=6 y=0	{1, 6}	{0}	[0]	
	y=5	{1, 6, 5}	{0}	[0]	
top-sort-DFS(5, [0], {0}, {1, 6})	x=5	{1, 6}	{0, 5}	[0, 5]	true
		{1}	{0, 5, 6}	[0, 5, 6]	true
		{ }	{0, 5, 6, 1}	[0, 5, 6, 1]	true

$\text{top_sort_DFS}(2, [0, 5, 6, 1], \{0, 5, 6, 1\}, \{ \})$	$x = 2$	$\{2\}$	$\{0, 5, 6, 1\}$	$[0, 5, 6, 1]$	
$\text{top_sort_DFS}(3, [0, 5, 6, 1], \{0, 5, 6, 1\}, \{2\})$	$y = 3$ $x = 3$	$\{2, 3\}$	$\{0, 5, 6, 1\}$	$[0, 5, 6, 1]$	
$\text{top_sort_DFS}(4, [0, 5, 6, 1], \{0, 5, 6, 1\}, \{2, 3\})$	$y = 4$ $x = 4$	$\{2, 3, 4\}$	$\{0, 5, 6, 1\}$	$[0, 5, 6, 1]$	
	$y = 5$	$\{2, 3\}$	$\{0, 5, 6, 1, 4\}$	$[0, 5, 6, 1, 4]$	true
	$y = 6$	$\{2\}$	$\{0, 5, 6, 1, 4, 3\}$	$[0, 5, 6, 1, 4, 3]$	true
	$y = 0$	$\{ \}$	$\{0, 5, 6, 1, 4, 3, 2\}$	$[0, 5, 6, 1, 4, 3, 2]$	true
$\text{top_sort_DFS}(7, [0, 5, 6, 1, 4, 3, 2], \{0, 5, 6, 1, 4, 3, 2\}, \{ \})$	$x = 7$ $y = 0$	$\{7\}$ $\{ \}$	$\{0, 5, 6, 1, 4, 3, 2\}$ $\{0, 5, 6, 1, 4, 3, 2, 7\}$	$[0, 5, 6, 1, 4, 3, 2]$ $[0, 5, 6, 1, 4, 3, 2, 7]$	true

topological order: 0, 5, 6, 1, 4, 3, 2, 7

Activity	Prerequisites	Duration
0	-	1
1	6	2
2	3, 6	1
3	4, 6	2
4	5	1
5	-	2
6	0, 5	5
7	0	3

