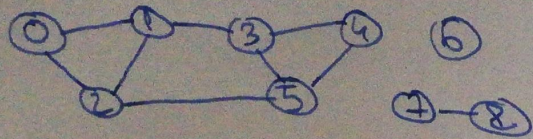
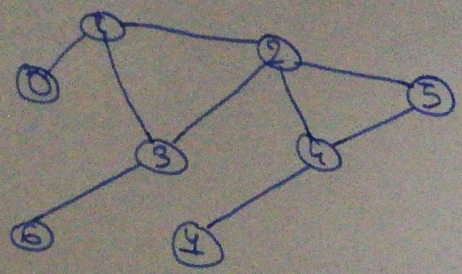


Lab 3 Find the connected components of an undirected graph using a depth-first traversal of the graph.



Vertex	New vertex	List	Total	Visited	Components
0		$\leftarrow [0] \leftarrow$	$\{0\}$	$\{ \}$	
1	1	$\leftarrow [1] \leftarrow$	$\{0, 1\}$		
2	2	$\leftarrow [2] \leftarrow$	$\{0, 1, 2\}$		
3	3	$\leftarrow [3] \leftarrow$	$\{0, 1, 2, 3\}$		
4	4	$\leftarrow [4] \leftarrow$	$\{0, 1, 2, 3, 4\}$		
5	5	$\leftarrow [5] \leftarrow$	$\{0, 1, 2, 3, 4, 5\}$		
				$\{0, 1, 2, 3, 4, 5\}$	
6		$\leftarrow [6] \leftarrow$	$\{6\}$	$\{0, 1, 2, 3, 4, 5, 6\}$	⑥
7		$\leftarrow [7] \leftarrow$	$\{7\}$		
8	8	$\leftarrow [8] \leftarrow$	$\{7, 8\}$	$\{0, 1, 2, 3, 4, 5, 6, 7, 8\}$	⑦—⑧

Lab 3 Find the connected components of an undirected graph using a depth-first traversal of the graph.



Vertex	New vertex	List	Total	Visited	Component
				{ }	
0	1	← [0] ←	{0}		
1		← [1] ←	{0, 1}		
2	2	← [2] ←	{0, 1, 2}		
3	3	← [3] ←	{0, 1, 2, 3}		
4	4	← [4] ←	{0, 1, 2, 3, 4}		
5	5	← [5] ←	{0, 1, 2, 3, 4, 5}		
6	6	← [6] ←	{0, 1, 2, 3, 4, 5, 6}		
7	7	← [7] ←	{0, 1, 2, 3, 4, 5, 6, 7}		
				{0, 1, 2, 3, 4, 5, 6, 7}	

