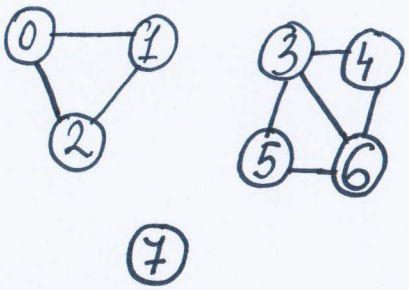
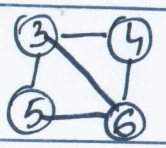
LAB 2. Manual execution | Find the connected components of a graph using BFS

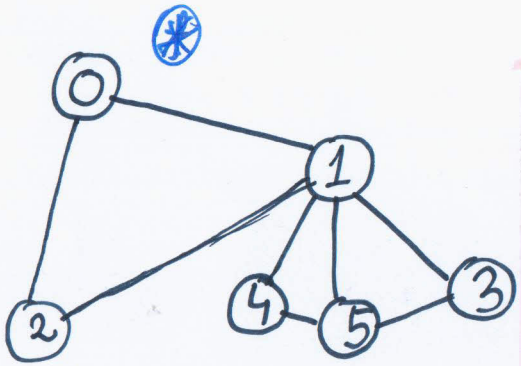


Node - dictionary

key	value
0	[1,2]
1	[0,2]
2	[0,1]
3	[4,5,6]
4	[3,6]
5	[3,6]
6	[3,4,5]
7	[]

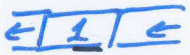
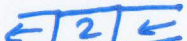
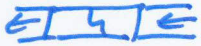
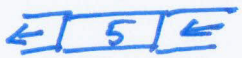
	x	y	queue	accessed	visited	connected components
call BFS(g,0)	0 1 2	1 2	←[0]← ←[1]← ←[2]←	[] [0] [0,1] [0,1,2]	[]	
					[0,1,2]	0 1 2
call BFS(3)	3 4 5 6	4 5 6	←[3]← ←[4]← ←[5]← ←[6]←	[] [3] [3,4] [3,4,5] [3,4,5,6]	[]	
					[3,4,5,6] [0,1,2,3,4,5,6]	
call BFS(7)	7		←[7]←	[7]		
					[0,1,2,3,4,5,6,7]	7

LAB 2 Manual execution



Nout dictionary

key	value
0	– [1,2]
1	– [0,2,3,4,5]
2	– [0,1]
3	– [1,5]
4	– [1,5]
5	– [1,3,4]

	x	y	queue	accessed	visited	
					[]	
call BFS(g,0)	0	1		[0] – empty		
				[0,1]		
		2		[0,1,2]		
	1	3		[0,1,2,3]		
		4		[0,1,2,3,4]		
		5		[0,1,2,3,4,5]		
	2					
	3					
	4					
	5					
					[0,1,2,3,4,5]	connected comp