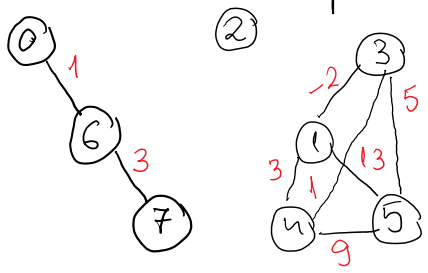
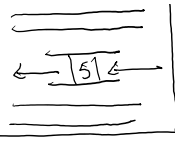
The connected components of an undirected graph using BFS:



Neighbours - dictionary

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

	x	y	queue	acc	visited	
					{}	
call accessible(0)	0 6 7	6 7	s=0 ←|0|← ←|6|← ←|7|←	{0} {0,6} {0,6,7}		
					{0,6,7}	connected component: 0-6-7
call accessible(1)	1 3 4 5	3 4 5	s=1 ←|1|← ←|3|← ←|4|← ←|5|←	{1} {1,3} {1,3,4} {1,3,4,5}		

				{1,3,4,5}		
					{0,1,3,4,5,6,7}	connected component: 3, 1, 4, 5
call accessible(2)	2		s = 2	{2}		
					{1,2,3,4,5,6,7}	connected component: 2