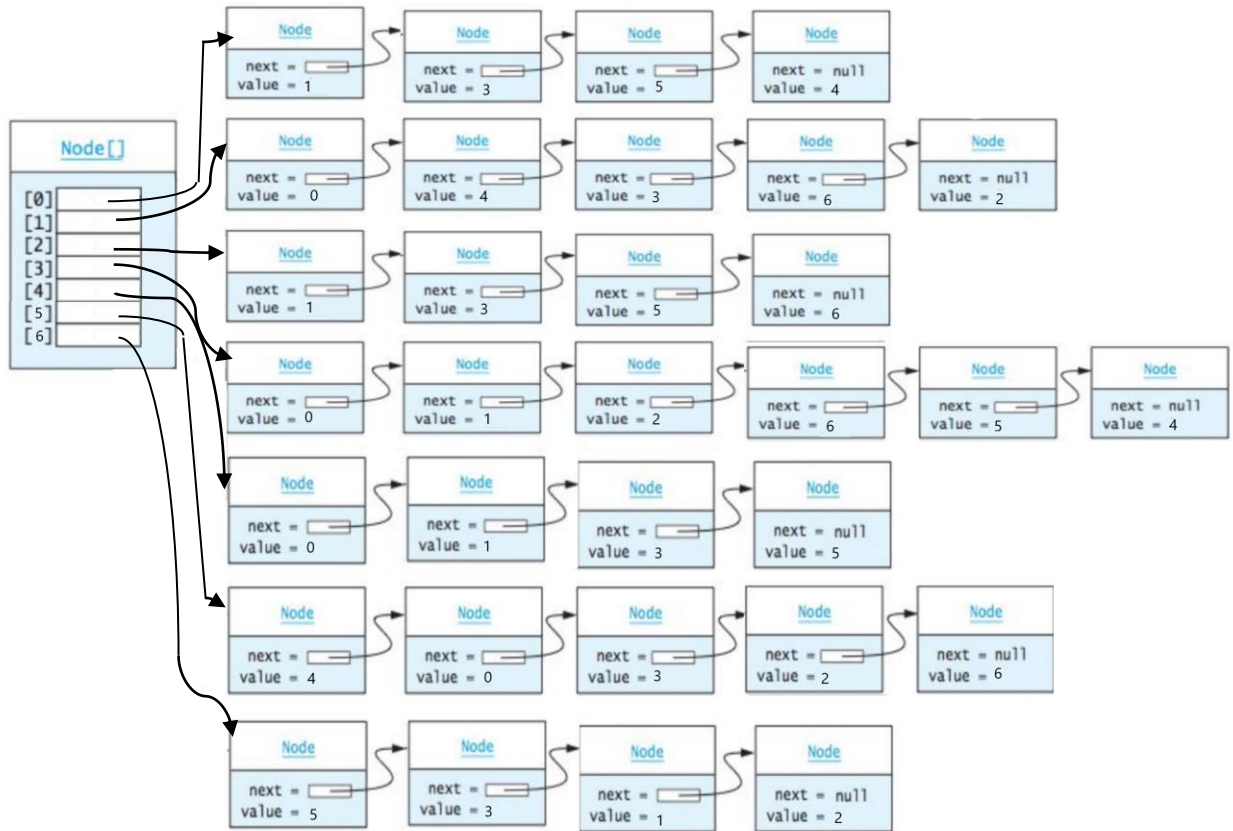


Adjacency List



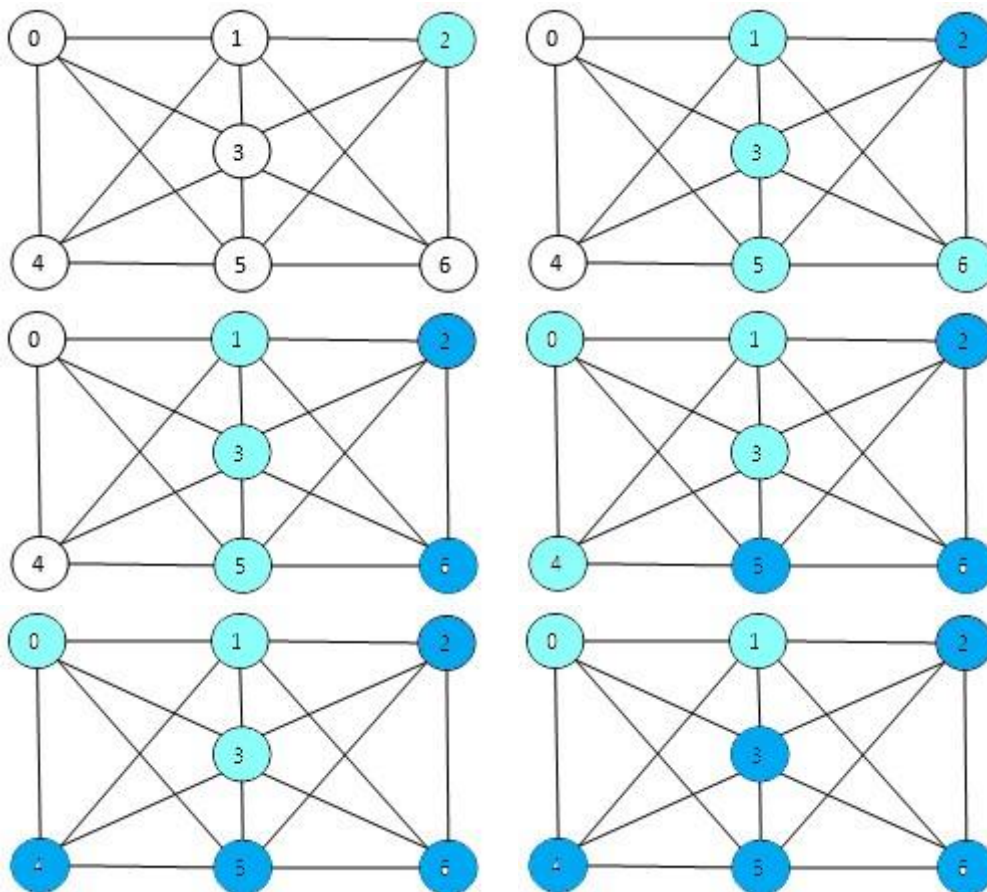
Adjacency Matrix

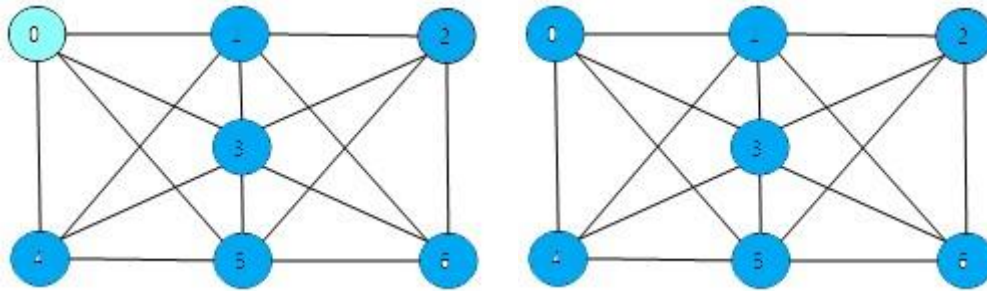
	[0]	[1]	[2]	[3]	[4]	[5]	[6]
[0]		1.0		1.0	1.0	1.0	
[1]	1.0		1.0	1.0	1.0		1.0
[2]		1.0		1.0		1.0	1.0
[3]	1.0	1.0	1.0		1.0	1.0	1.0
[4]	1.0	1.0		1.0		1.0	
[5]	1.0		1.0	1.0	1.0		1.0
[6]		1.0	1.0	1.0		1.0	

$|V| = 7$ and $|E| = 16$. Density = 2.29.

An adjacency matrix is most efficient since $|E|$ is 67% of $\frac{1}{2} |V|^2$.

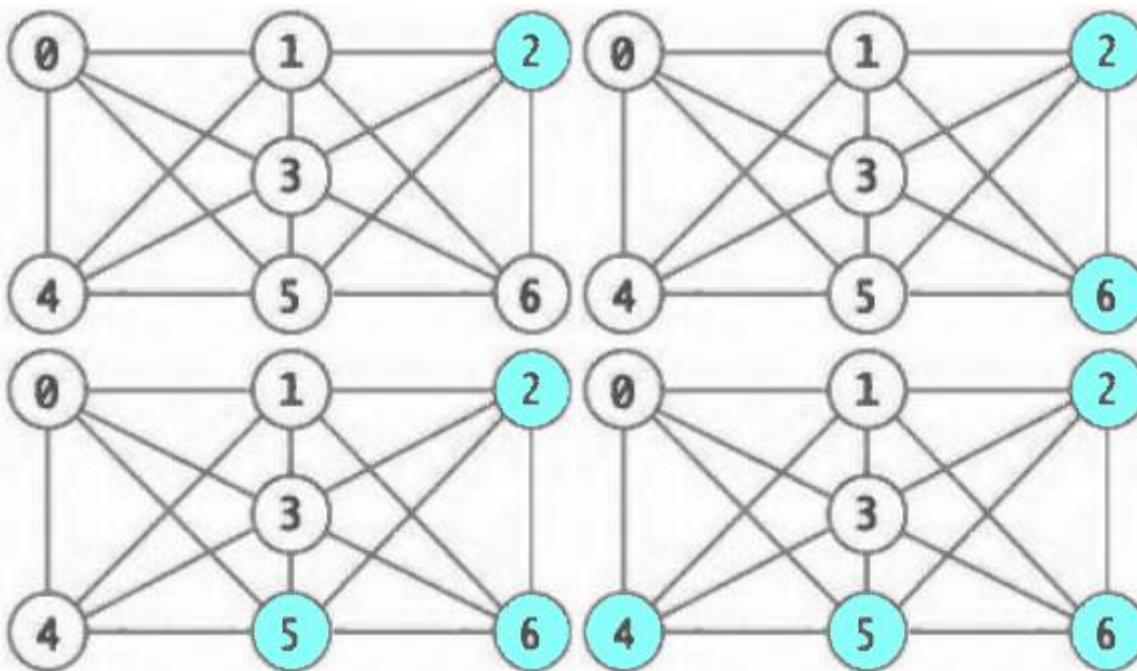
BFS

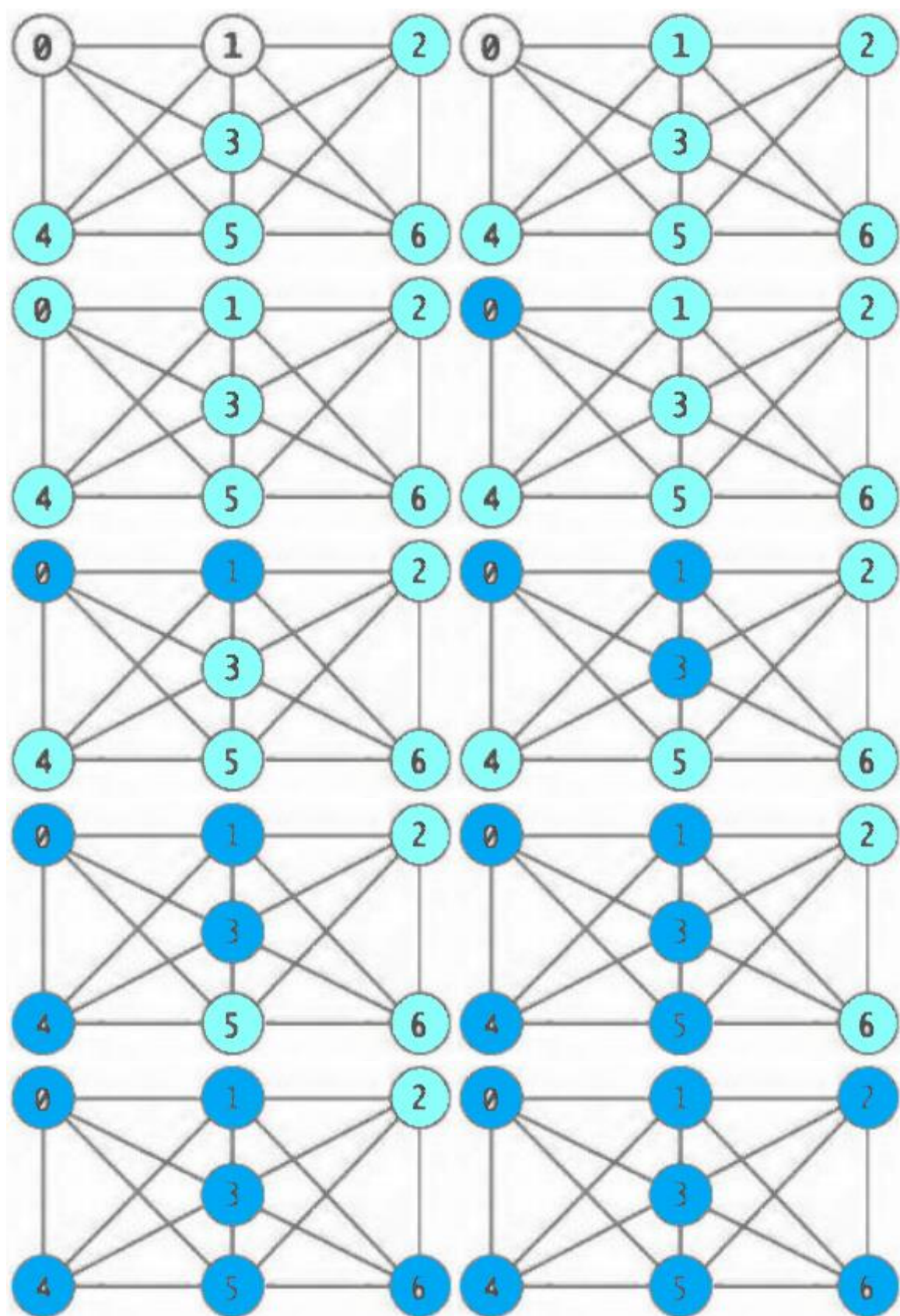




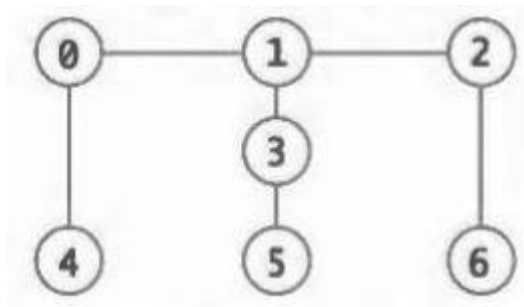
Vertex Being Visited	Queue Contents after	Visit Sequence
2	6 5 3 1	2
6	5 3 1	2 6
5	4 3 1 0	2 6 5
4	3 1 0	2 6 5 4
3	1 0	2 6 5 4 3
1	0	2 6 5 4 3 1
0	empty	2 6 5 4 3 1 0

DFS

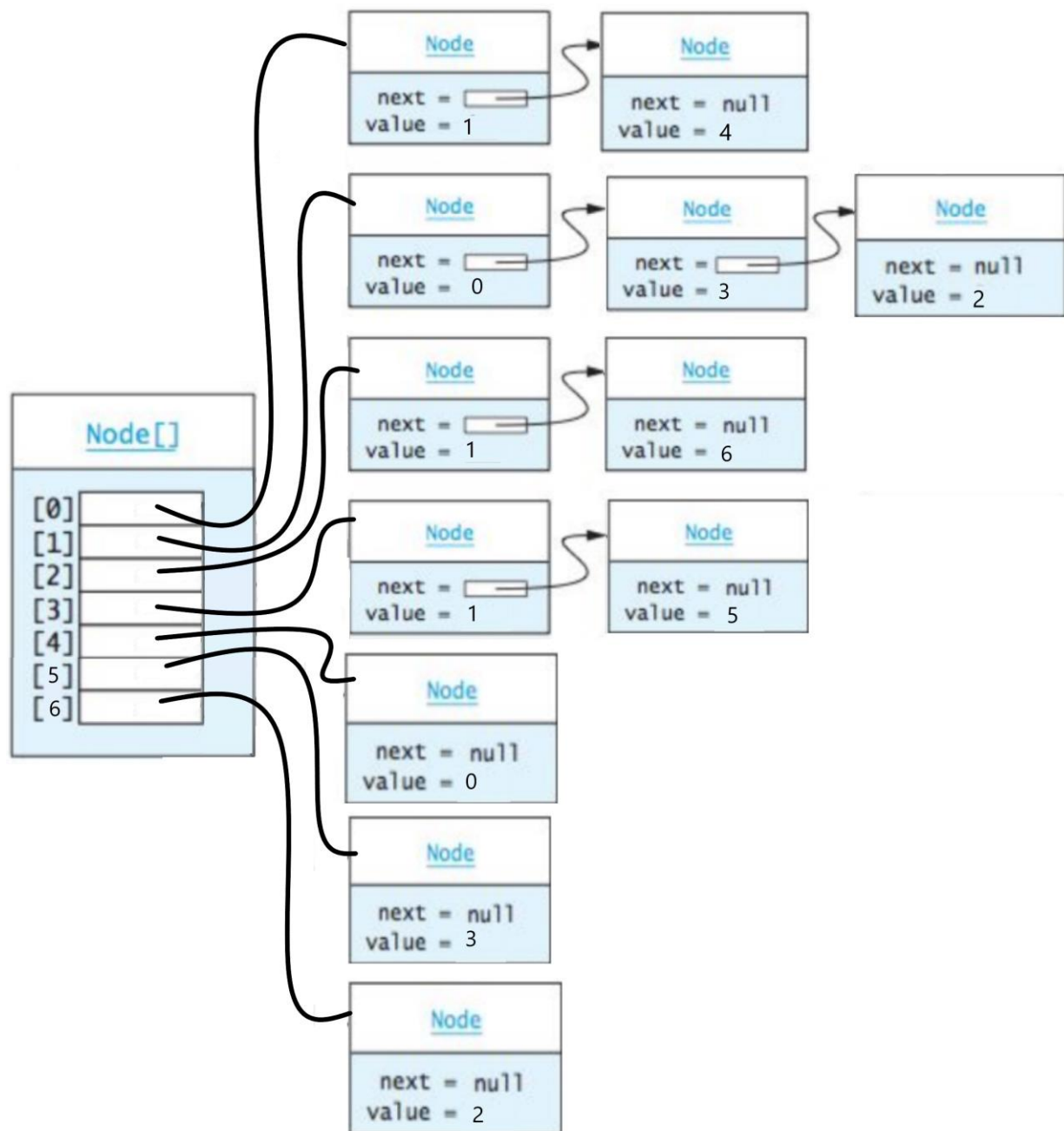




Operation	Adjacent Vertices	Visit Order	Finish Order
Visit 2	1 3 5 6	2	
Visit 6	1 2 3 5	2 6	
Visit 5	0 2 3 4 6	2 6 5	
Visit 4	0 1 3 5	2 6 5 4	
Visit 3	0 1 2 4 5 6	2 6 5 4 3	
Visit 1	0 2 3 4 6	2 6 5 4 3 1	
Visit 0	1 3 4 5	2 6 5 4 3 1 0	
Finish 0			0
Finish 1			0 1
Finish 3			0 1 3
Finish 4			0 1 3 4
Finish 5			0 1 3 4 5
Finish 6			0 1 3 4 5 6
Finish 2			0 1 3 4 5 6 2



Adjacency List



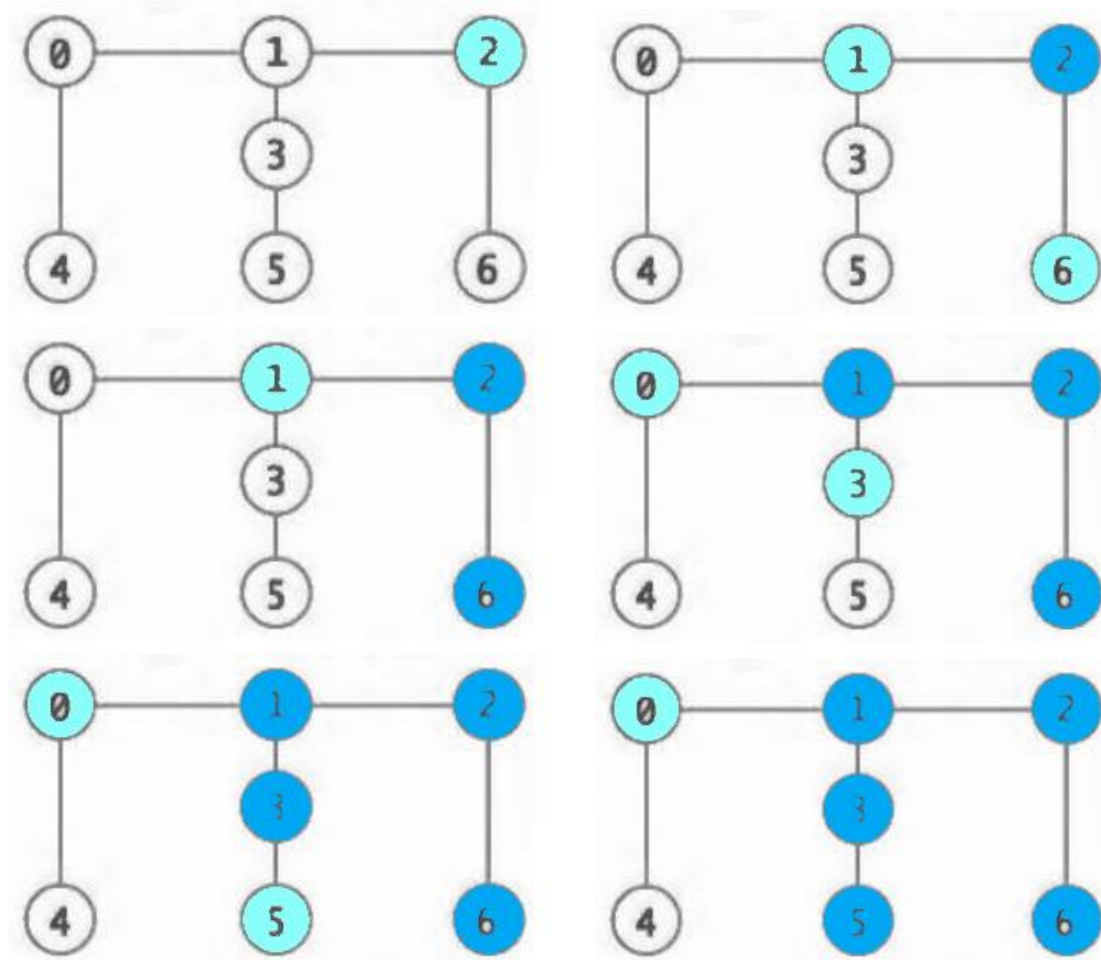
Adjacency Matrix

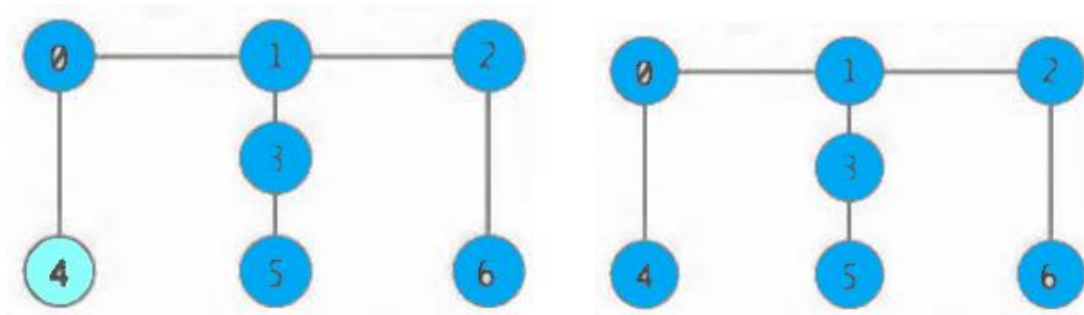
	[0]	[1]	[2]	[3]	[4]	[5]	[6]
[0]		1.0			1.0		
[1]	1.0		1.0	1.0			
[2]		1.0					1.0
[3]		1.0				1.0	
[4]	1.0						
[5]				1.0			
[6]			1.0				

$|V| = 7$ and $|E| = 6$. Density = 0.86.

An adjacency list is most efficient since $|E|$ is less than $|V|$.

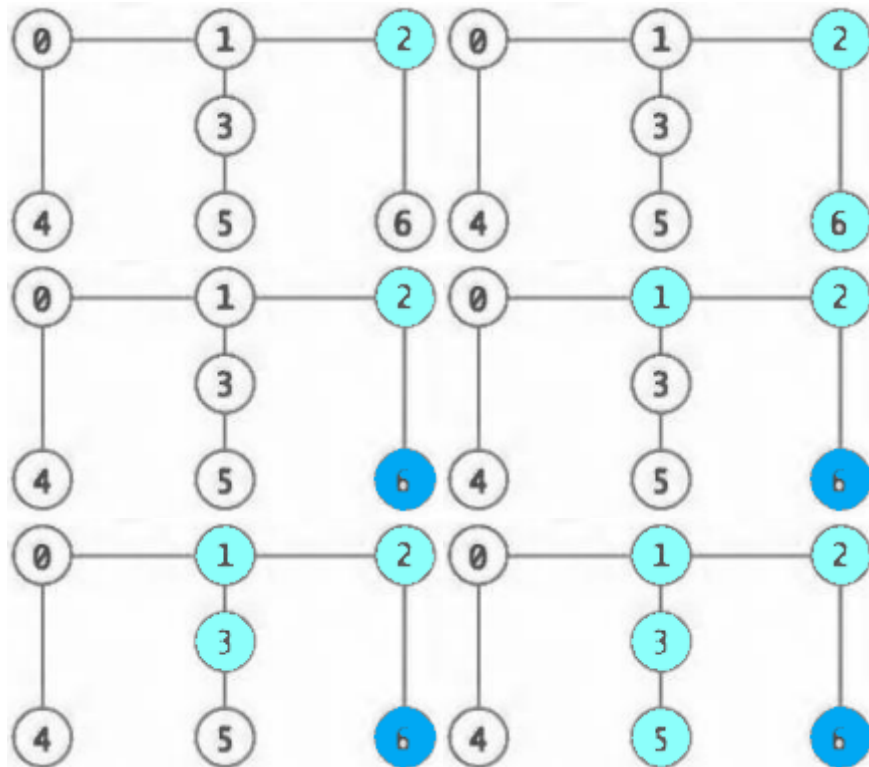
BFS

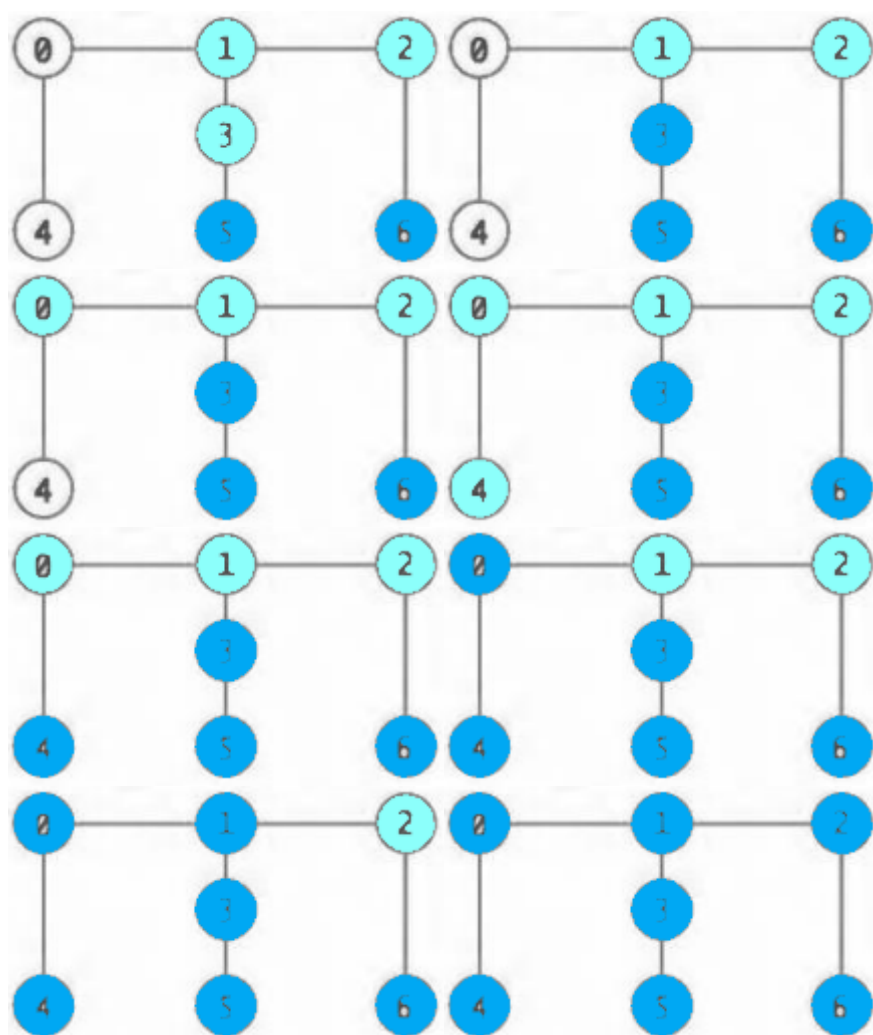




Vertex Being Visited	Queue Contents after	Visit Sequence
2	6 1	2
6	1	2 6
1	3 0	2 6 1
3	5 0	2 6 1 3
5	0	2 6 1 3 5
0	4	2 6 1 3 5 0
4	empty	2 6 1 3 5 0 4

DFS





Operation	Adjacent Vertices	Visit Order	Finish Order
Visit 2	1 6	2	
Visit 6	2	2 6	
Finish 6			6
Visit 1	0 2 3	2 6 1	
Visit 3	1 5	2 6 1 3	
Visit 5	3	2 6 1 3 5	
Finish 5			6 5
Finish 3			6 5 3
Visit 0	1 4	2 6 1 3 5 0	
Visit 4	1	2 6 1 3 5 0 4	
Finish 4			6 5 3 4
Finish 0			6 5 3 4 0
Finish 1			6 5 3 4 0 1
Finish 2			6 5 3 4 0 1 2