1st iteration

Vertex	Shortest distance from A	Previous Vertex
A	0	
B		
C		
D		
E		

Unvisited = [B, C, D, E]

2nd iteration
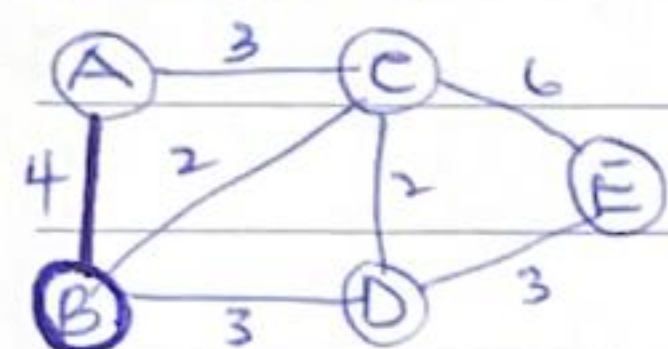
Vertex	Shortest distance from A	Previous Vertex
A	0	
B	4	A
C		
D		
E		

Unvisited = [C, D, E]

3rd iteration
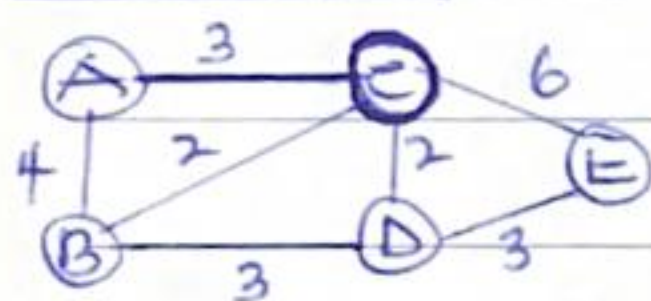
Vertex	Shortest distance from A	Previous Vertex
A	0	
B	4	A
C	3	A
D		
E		

Unvisited = [D, E]

4th iteration
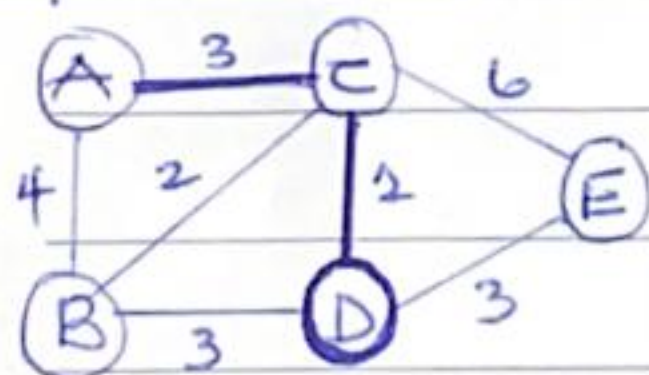
Vertex	Shortest distance from A	Previous Vertex
A	0	
B	4	A
C	3	A
D	5	C
E		

Unvisited = [E]

5th iteration
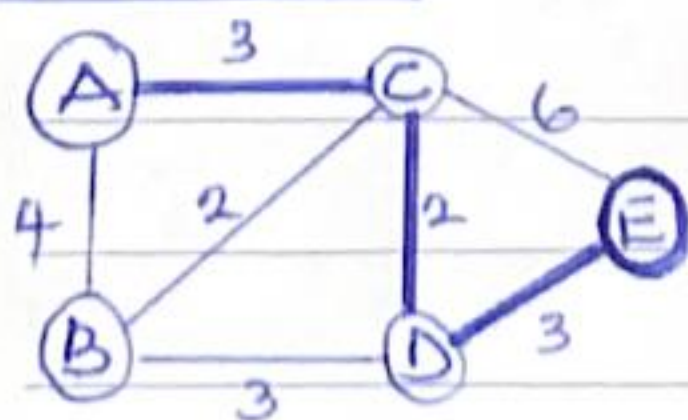
Vertex	Shortest distance from A	Previous Vertex
A	0	
B	4	A
C	3	A
D	5	C
E	8	D

Unvisited = [ ]