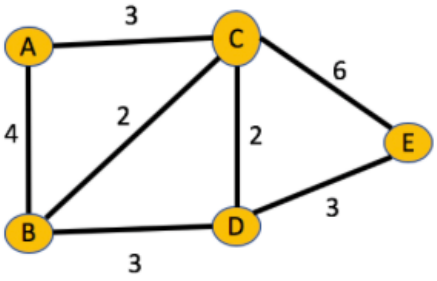

Vertex	Shortest distance from A	Previous vertex
A		
B		
C		
D		
E		

1. Initialisation step: Unvisited =[A, B, C, D, E]

Vertex	Shortest distance from A	Previous vertex
A	0	
B	∞	undefined
C	∞	undefined
D	∞	undefined
E	∞	undefined

2. First iteration:

   Unvisited = [B, C, D, E]

Vertex	Shortest distance from A	Previous vertex
A	0	
B	4	A
C	3	A
D	∞	undefined
E	∞	undefined

3. Second iteration:

   Unvisited = [B, D, E]

Vertex	Shortest distance from A	Previous vertex
A	0	
B	4	A
C	3	A
D	5	C
E	9	C

4. Third iteration:

   Unvisited = [D, E]

Vertex	Shortest distance from A	Previous vertex
A	0	
B	4	A
C	3	A
D	5	C
E	9	C

5. Fourth iteration:

   Unvisited = [E]

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

6. Final iteration: A-E

   Unvisited = [ ]

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

The shortest distance from A to E is {ACDE}