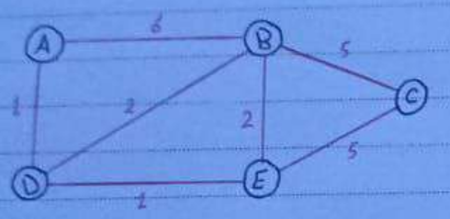
Name: Dana mohammad Aldahoude HomeWork 1

ID: 32015333003

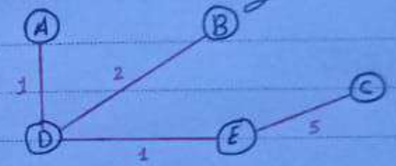
Date: 10/4/2023

Q:

Solve the Following using Dijkstra's Algorithm for shortest path:



The New Graph
(Routing Tree)



Sol:

Step	m	B	C	D	E
(A) Initial	{A}	6 (A→B)	∞	1 (A→D)	∞
2	{A, D}	(1+2)=3 (A→D→B)	∞	1 (A→D)	(1+1)=2 (A→D→E)
3	{A, D, E}	3	7 (A→D→E→C)	1	2
4	{A, B, D, E}	3	7	1	2
5	{A, B, D, E, C}	3	7	1	2

	A	B	C	D	E
A	///	D	D	D	D
B	D	///	D	D	D
C	E	E	///	E	E
D	A	B	E	///	E
E	D	D	C	D	///

→ the next node you must choose (First step) node.