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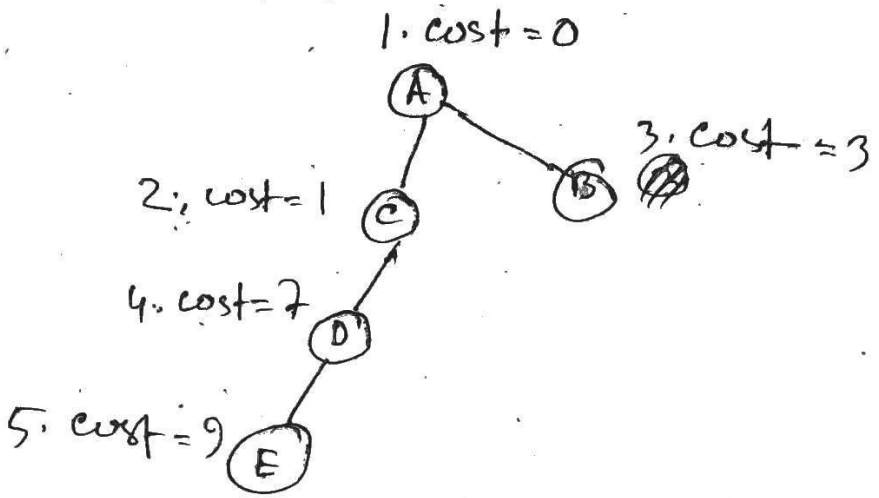
Ans:



According to the Dijkstra's Algorithm. it'll follow the instruction.

Loop. → (w) → number (N')

find weight not in N' such that D(w) is min

add w to N'

update D(v) for all v adj to w & not in N'

$D(v) = \min(D(v); D(w) + C(w,v))$

until all nodes in N'

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step	N'	D(B) P(B)	D(C) P(C)	D(D) P(D)	D(E) P(E)
0	A	3, A	1, A	∞	∞
1	AC	3, A		7, A	∞
2	ACB			7, C	10, B
3	ACBD				9, D
4	ACBDE				

Here, for this solution, construct shortest path by tracing predecessing nodes from this algorithm.

— P —