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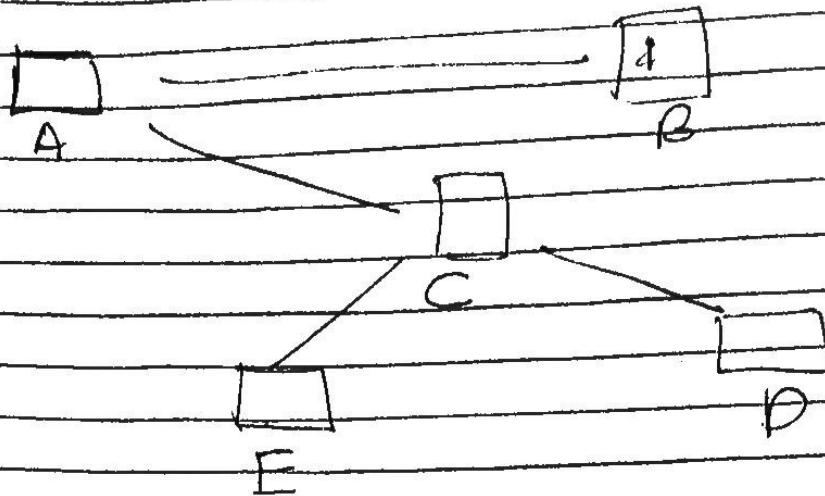
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Distance Vector Algorithm

Topology



Algorithm

Let $C(x, v) \rightarrow$ ^{path} cost of moving from x to neighbor v .

Let $D_x \rightarrow$ distance vector, containing cost to all destinations from x .

Let $d_x(y) \rightarrow$ least cost path from node x to node y

At each node x :

Do Initialization.

For all destinations y in N :

$$D_x(y) = C(x, y)$$

For each neighbour w

$$D_w(y) = ?$$

For all destination y in N .

For each neighbour w

Send distance vector $D_x = [D_x(y) : y \in N]$ to w

loop

wait (until I receive any distance vector from some neighbour w)

for each y in N :

$$D_x(y) = \min_v \{ C(x, v) + D_v(y) \}$$

If $D_x(y)$ is changed for any destination y

Send distance vector $D_x = [D_x(y) : y \in N]$ to all neighbours

for each.

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