

- Distance Vector Routing Algorithm: ① A routing method in which each router sends its neighbours a list of networks it can reach and the destination to that network. ② Here we are using other names called Bellman-Ford routing algorithm, after the researchers who developed it in 1957, Ford-1962, it was the original routing algorithm of ARPANET and also used in the internet under the name of RIP.
- ③ In distance vector, each router maintains a routing table indexed by and ~~subnet~~ containing one entry for each router in the subnet. Its entry contains two parts:
- a) the preferred outgoing line to use for that destination
 - b) an estimate of the time or distance to that destination
- ④ The metric used might be number of hops, time delay in milliseconds, total no. of packets queued along the path. The router is assumed to know the distance vector of each of its neighbours.
- ⑤ If the metric is hops, the distance is just one hop, if the metric is queue length, the router simply examines each queue.

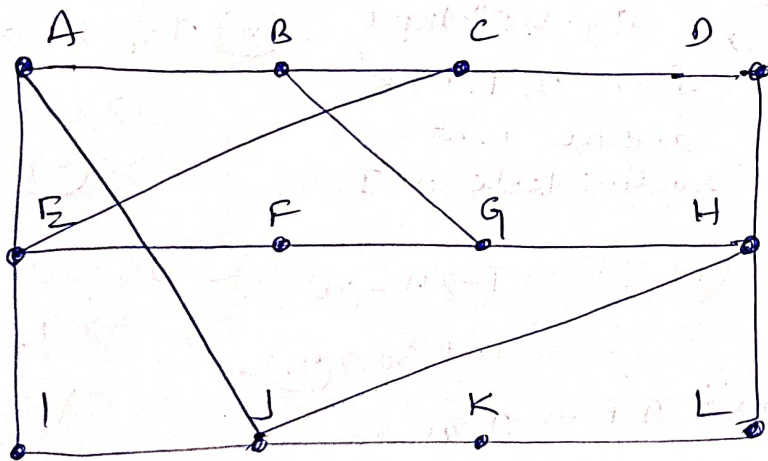


fig rep's SUBNET

From:

① $J \rightarrow A \Rightarrow 0$

② $J \rightarrow B \Rightarrow J \rightarrow A \rightarrow B$
 $8 + 12 = (20)$

③ $J \rightarrow B \Rightarrow J \rightarrow E \rightarrow B$
 $10 + 36 = (46)$

④ $J \rightarrow B \Rightarrow J \rightarrow K \rightarrow B$
 $6 + 28 = (34)$

⑤ $J \rightarrow B \Rightarrow J \rightarrow H \rightarrow B$
 $12 + 31 = (43)$

⑥ $J \rightarrow C \Rightarrow J \rightarrow A \rightarrow C$
 $\Rightarrow 8 + 25 = (33)$

⑦ $J \rightarrow C \Rightarrow J \rightarrow H \rightarrow C$
 $\Rightarrow 12 + 19 = (31)$

⑧ $J \rightarrow C \Rightarrow J \rightarrow E \rightarrow C$
 $\Rightarrow 10 + 18 = (28)$

⑨ $J \rightarrow D \Rightarrow J \rightarrow A \rightarrow D$
 $\Rightarrow 8 + 40 = (48)$

⑩ $J \rightarrow D \Rightarrow J \rightarrow K \rightarrow D$
 $\Rightarrow 6 + 36 = (42)$

⑪ $J \rightarrow D \Rightarrow J \rightarrow E \rightarrow D \Rightarrow 10 + 27 = (37)$