Dijkstra's / Link State / OSPF
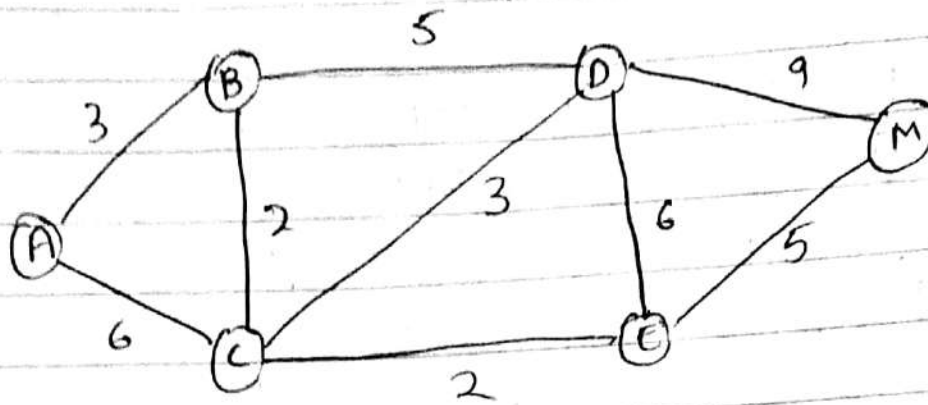
Source = A.

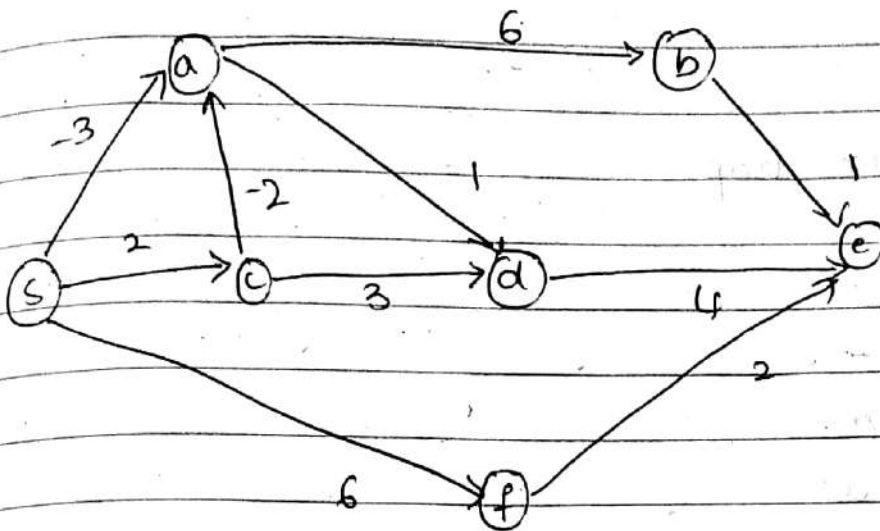|	B	C	D	E	M
A	③	6	∞	∞	∞
AB	–	⑤	8	∞	∞
ABC	–	–	8	⑦	∞
ABCE	–	–	⑧	–	12
ABCED	–	–	–	–	⑫
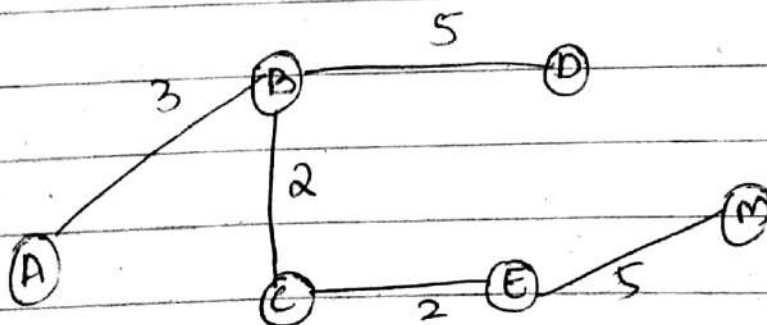
RIP/ Bellman Ford/ Distance Vector.

Step1: Exchange "HELLO" packets with immediate neighbors and fill the link state table.

S's table

Source Address s=S

Dest	Cost	next hop
a	-3	—
c	2	—
f	6	—

Similarly others,

A's table.

Dest	Cost	next hop
b	6	—
d	1	—

C's table

Dest	cost	hop
d	3	—

F's table

Dest	cost	hop
e	2	—

So on...

Step2: Exchange with neighbors link-state table

S with A.

dest	cost	next hop
a	-3	-
c	2	-
f	6	-
b	3	a
d	-2	a.

S with c

dest	cost	next hop

" same continues.

S with f.
same
+

| e | 8 | f. |

final s's table

S	0	-
a	-3	-
c	2	-
b	3	a
e	9	a,d
f	6	-
d	-2	a

	a	b	c	d	e	f
s	(-3)	∞	2	∞	∞	6
sa	—	3	2	(-2)	∞	6
sad	—	3	(2)	—	2	6
sadc	—	3	—	—	(2)	6
sadce	—	(3)	—	—	—	6
sadceb	—	—	—	—	—	6
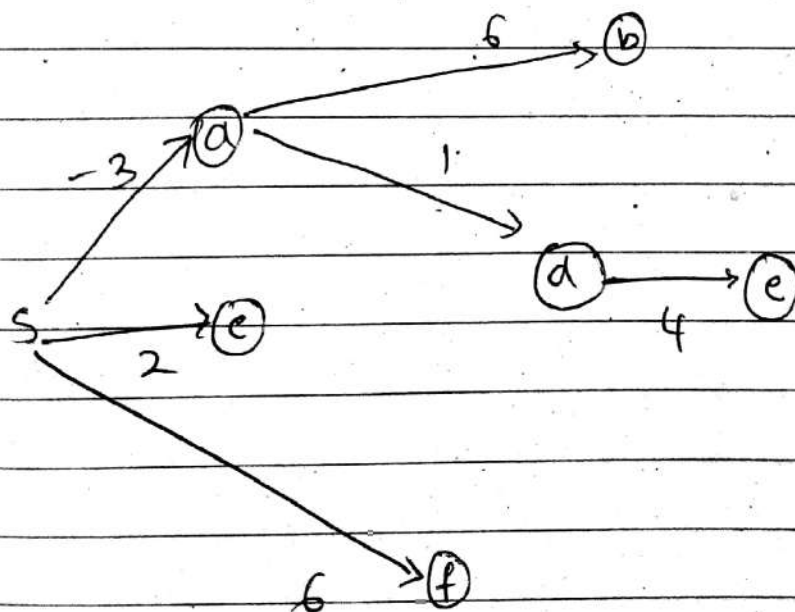
$$\text{Slotted} = Np \star p(1-p)^{N-1}.$$

$$\text{Aloha} - Np \star p(1-p)^{2(N-1)}$$