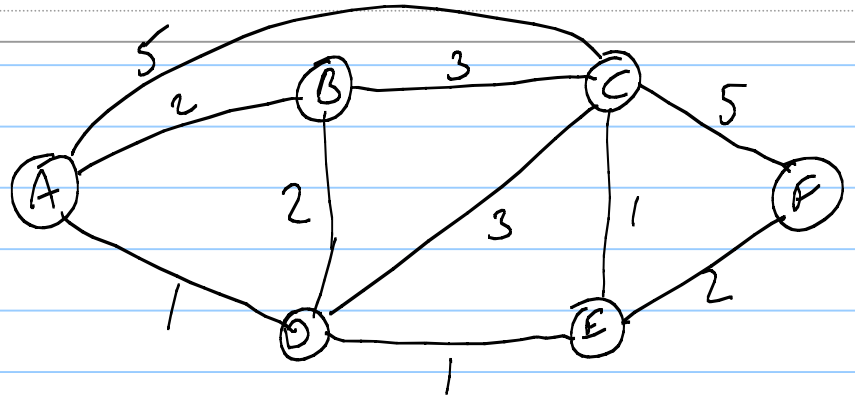
port # > 1023

Note Title 10/8/2008

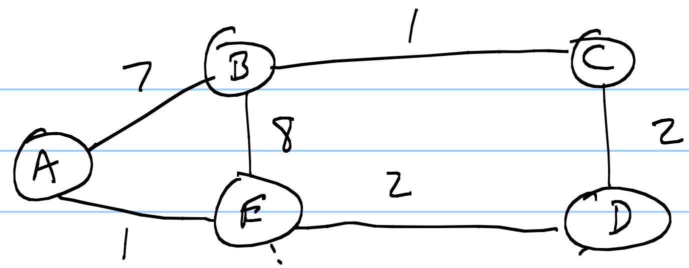


A → E

EDA (reverse)

A → C CEDA

Step	Finished	B ✓	C ✓	D ✓	E ✓	F ✓	
-1	–	∞	∞	∞	∞	∞	
0	A	2, A	5, A	1, A	∞	∞	A -> F
1	AD		4, D		2 D	∞	FEDA
2	ADE		3, E			4, E	
3	ADEB						
4	ADEBC						



E's neighbors

$D^E()$	A	B	D
A	(1)	14	5
B	7	8	(5)
C	6	9	(4)
D	4	11	(2)

Forwarding table easily derived.

Start w/ ∞ entries in table except for direct neighbors.
Send update whenever entries change. (including 1st time)

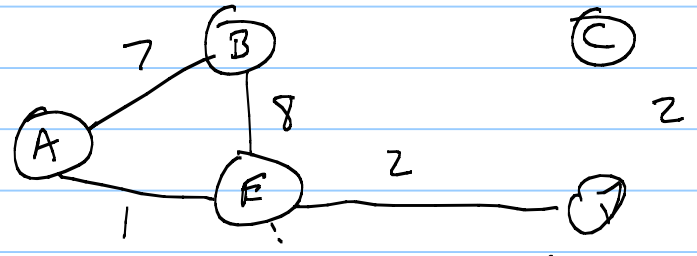
When update received, update the table.

Practicalities – Too many hosts! Even too many networks!

Count to infinity problem.

Flooding

Demo Progs for Shaikat 3rd Monday } Sloan 353
or 4:45 Tuesday }



B	A	C	E	
A	(7)	∞	9	A:
C	∞	∞	17	C:
D	∞	∞	10	D:
E	∞	∞	(8)	E:

B: A,7 / E,17 / E,10 / E,8

E	A	B	D	
A	(1)	15	∞	A:
B	∞	(8)	∞	B:
C	∞	(25)	∞	C:
D	∞	18	(2)	D:

E: A,1 / B,8 / C,∞ / D,2

Count to infinity problem for D.V. algorithm.

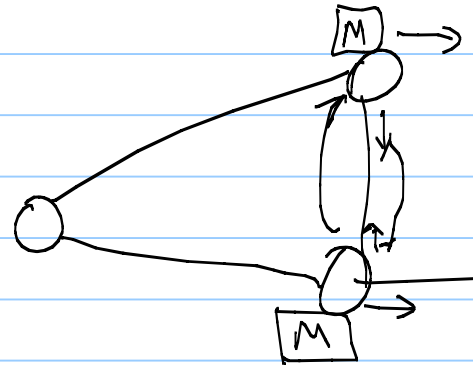
Poisoned Reverse — send ∞ as my distance

Poisoned reverse:

Send ∞ as my distance to x thru B if I'm routing traffic for x through B

Routing by Flooding

Sequence # in msg. — Don't send again if already sent



Timeouts

Lifetimes of information is vital

Amount of traffic

Stability

Response to changes.

Bad states along the way.

Too Many Destinations -

Hierarchies —

Group hosts into networks

Group networks into regional/organizational networks.

Route between elements of hierarchy.