Q1:

Round 0

A	cost	next-hop
B	5	B
C	1	C
D	∞	—

B	cost	next-hop
A	5	A
C	1	C
D	∞	—

C		
A	1	A
B	1	B
D	1	D

D		
A	∞	—
B	∞	—
C	1	C

Round 1

A		
B	2	C
C	1	C
D	2	C

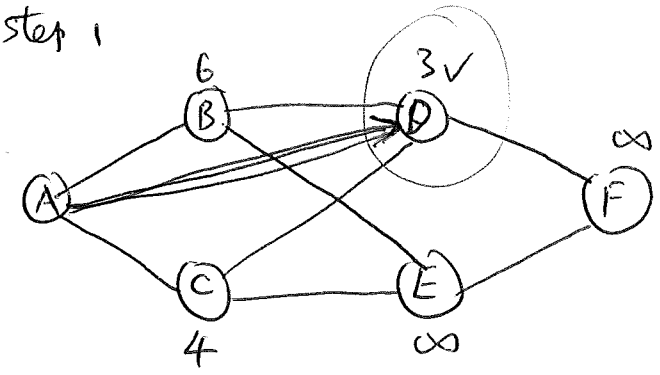
B		
A	2	C
C	1	C
D	2	C

C		
A	1	A
B	1	B
D	1	D

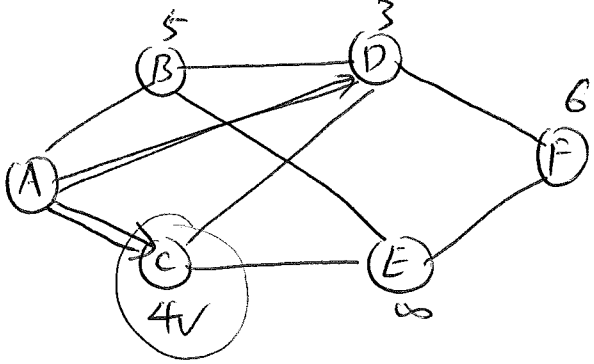
D		
A	2	C
B	2	C
C	1	C

Q2:

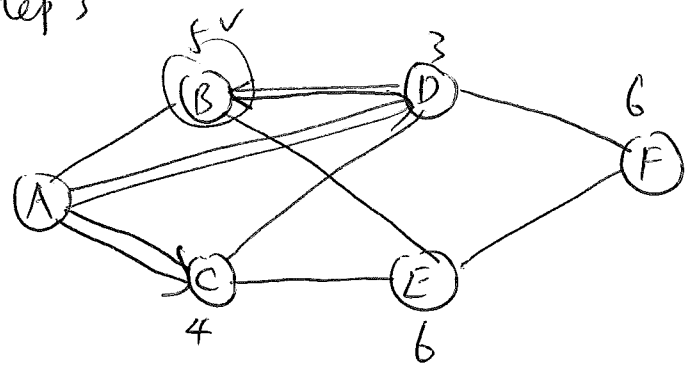
step 1



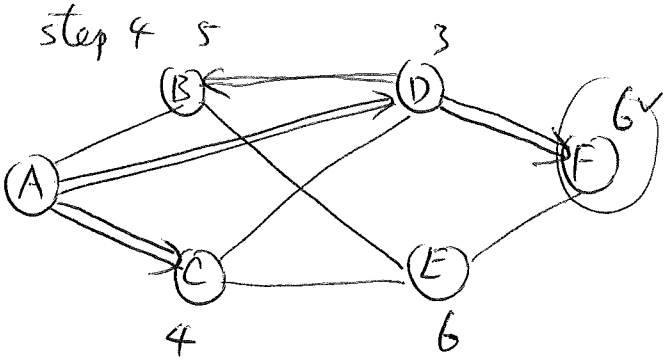
step 2



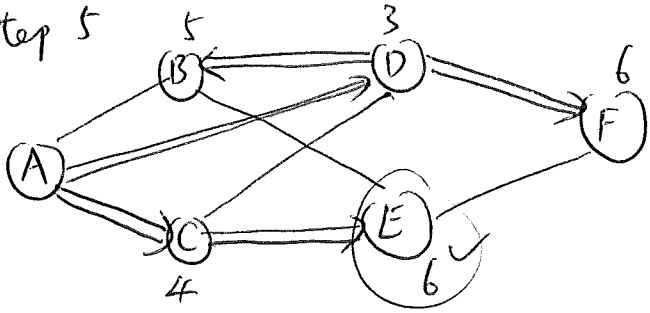
step 3



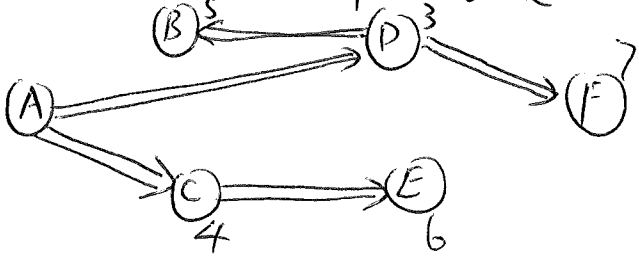
step 4



step 5



Final shortest path tree



Q3

rcv_buffersize = 10

nextPacketExpected = 9

LastPacketRead = 3

So advertised_window = 10 − ((9−1) − 3) = 5

on the sender side:

LastPacketsend = 12

LastPacketAcked = 8

so effective_window = 5 − (12 − 8) = 5 − 4 = 1

it means the sender can send one more packet, i.e., packet 13.
So packet 14 can not be sent at this moment!