

Md Fahimul Islam

2017-1-62-022

Ans to the Qu no 801

class A

Here IP : 78.56.223.185

78.	00000000	00000000	00000000
Subnet mask ↓ 11111111	11111111	00000000	00000000
3rd Subnet	00000111	11111111	(Broadcast) 00000001 (4th host)
7th Subnet	00001111	00000000	11111110
7th Subnet	00001111	11111111	

① Subnet mask : 255.254.0.0/15 (DN)
" IP (CIDR) = 78.56.223.185/15

② Broadcast address - 3rd Subnet
78.7.255.255

2

② 1st host of 7th Subnet:

78.14.0.1

1st host of 7th Subnet:

78.15.255.254

Ans to the Q no: 2

here IP: 142.240.232.73/26

142

240

00000000

00000000

11111111

00000010

00000000

01000000

10000000

01111110

1st host

1st Subnet

1st Subnet

9th Subnet

③ number of usable Subnet
possible within the
network : $2^{10} - 2 = 1022$

3

⑥ Int Subnet:
142.240.0.64

Int Subnet:
142.240.255.128

⑦ Last host IP of the 9th
Subnet
142.240.2.126

4

Ans to the Qv no - 4

There 1 chane destination address

142. 163. 135. 250
 10001110 10100011 10000111 11111011
 10001110 10100011 11001000 00010110

 add operation
 10001110
 142
 10100011
 163
 10000000
 128
 00010010
 18

So the Subnet IP: 142. 163. 128. 18

Class B

and

142 163 0000 0000 0000 0000
 So $2^6 - 2$
 $= 64 - 2$
 $= 62$ Subnet are possible

5

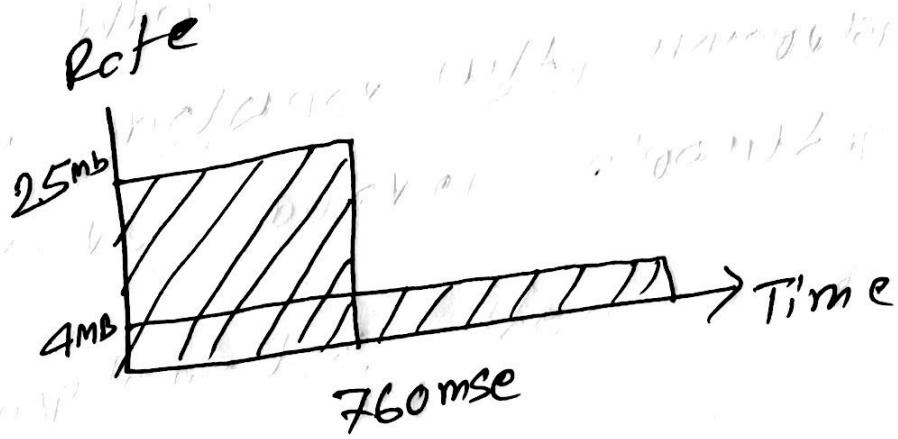
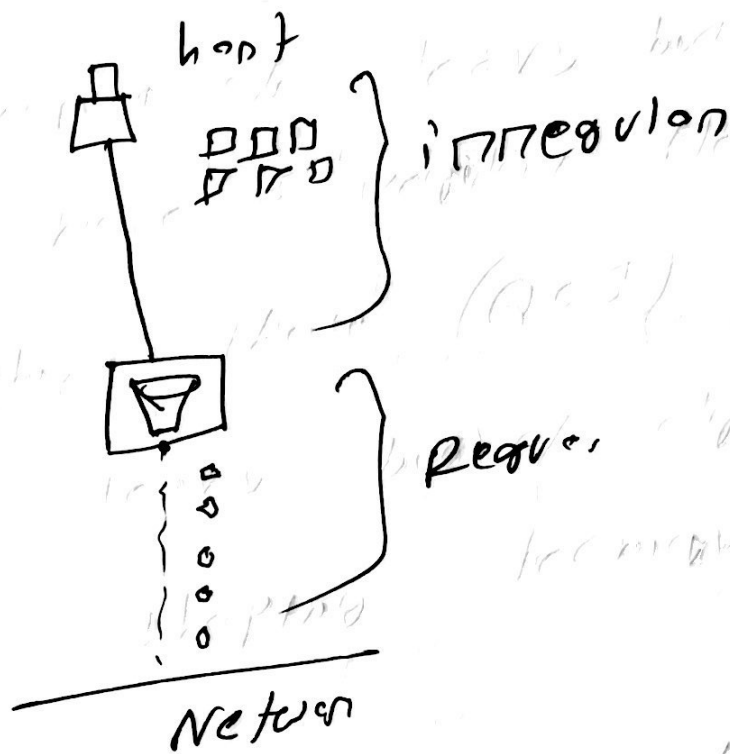
Ans to the Q no : 5

The purpose of leaky bucket algorithm is to have a regular flow of data. To achieve these (QoS), we can use to leaky bucket algorithm. of traffic shaping technique.

When a lot of data enter a network with irregular flow, leaky bucket algorithm can be implemented. there a regular flow achieved.

The buffer act like queue, and data flow the are need with the leaky to the network.

6



here input 25 mb/sec With 760ms
network data rate 4mb/sec

7

$$So \frac{25}{1000} \times 760 \text{ msec}$$

$$= 19 \text{ ~~mb~~ mb}$$

$$\text{time} = \frac{\text{data}}{\text{rate}} = \frac{19 \text{ MB} \times 1000}{4}$$

$$= 4.75 \text{ msec}$$

Ans

8/

Ans to the qn no : 6

The present threshold is
 $= 500 \text{ KB}$

present congestion window is
 $= 128 \text{ KB}$

Time out point $= 504$

So the next congestion window after

$$128 \times 2 = 256 - \text{1st congestion}$$

$$256 \times 2 = 512$$

But the threshold
is 500 KB
window

So the 2nd congestion is 500 KB

So 3rd congestion is 501 KB

4th congestion is 502 KB

9/

5th congestion in 503 KB

6th " window 504 KB

here the time out point is 504 KB.

So we need to set a new

threshold. So

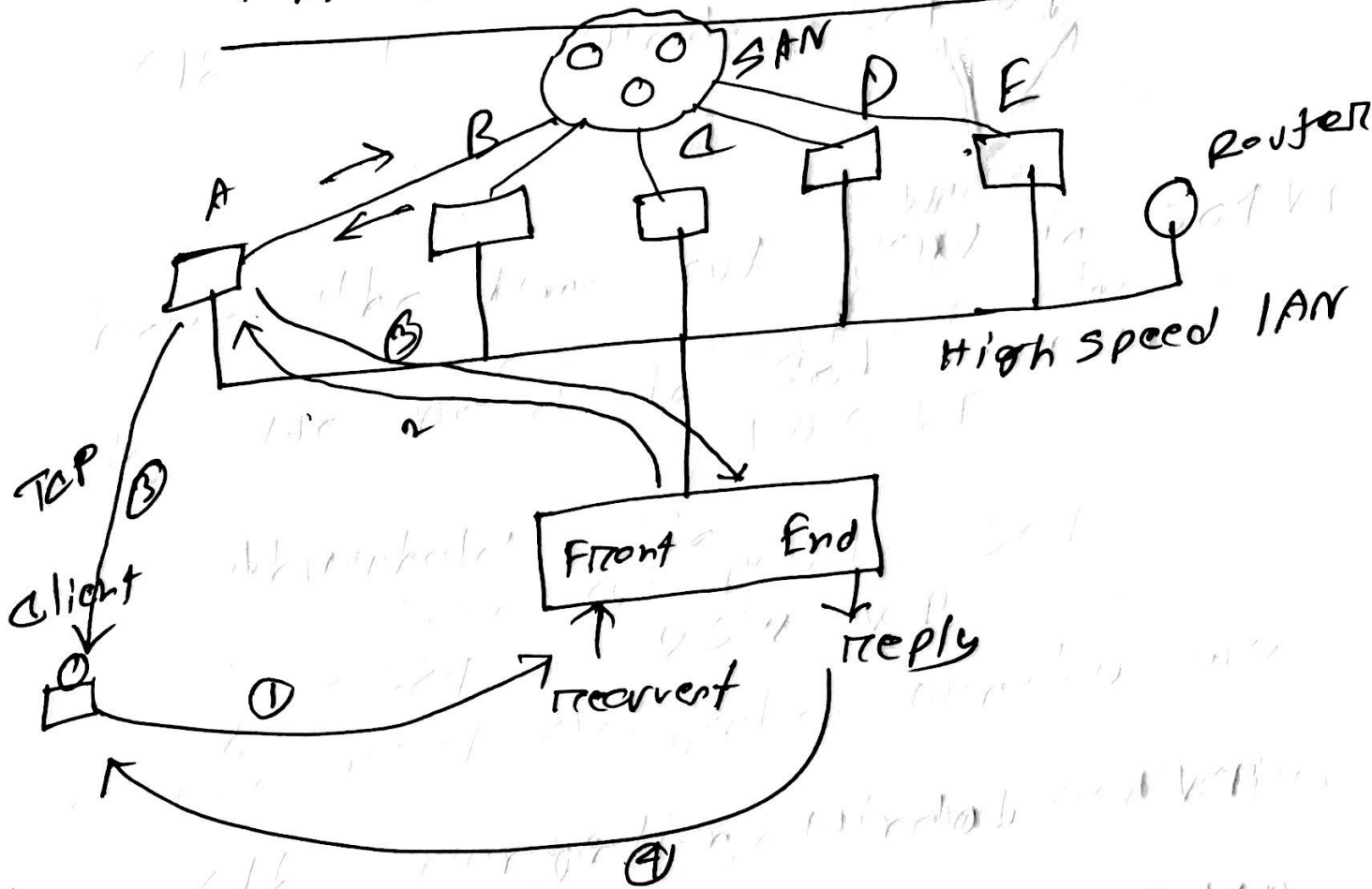
$$\frac{1}{2} \times 504 = 252 \text{ KB}$$

7th congestion window = 1 KB

8th congestion " = 2 KB

18

Ans to the Q no : 7



Every processing has own cache
 memory. It can hold a save
 more data. When a client for
 a specific information its gone
 then it connect to the server

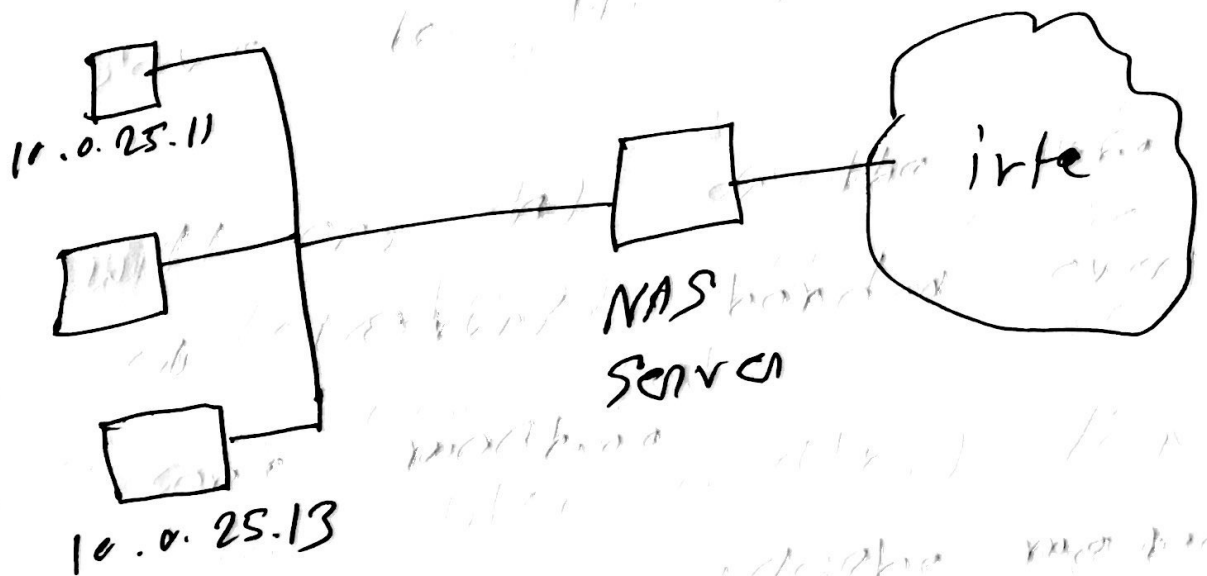
//

Let's say client wants to
visit fox.com. So he sends
search for it. This req
goes to node A. At the
information in a cache already
A it will replay faster. But
it not then go to HDD
and save to it. to cache.
This will not on the same
type of request handed over
the same machine
not having own cache memory
They will reply back to the
client

12

If there are many servers the
up to top hand of the
Then the server directly people
to the client.

App to the OV no-3



13

there web server on c

164.128.136.147

there ip 10.0.25.11

are received to the DNS
serve to it build the
the Not set Keep track
to go the web server