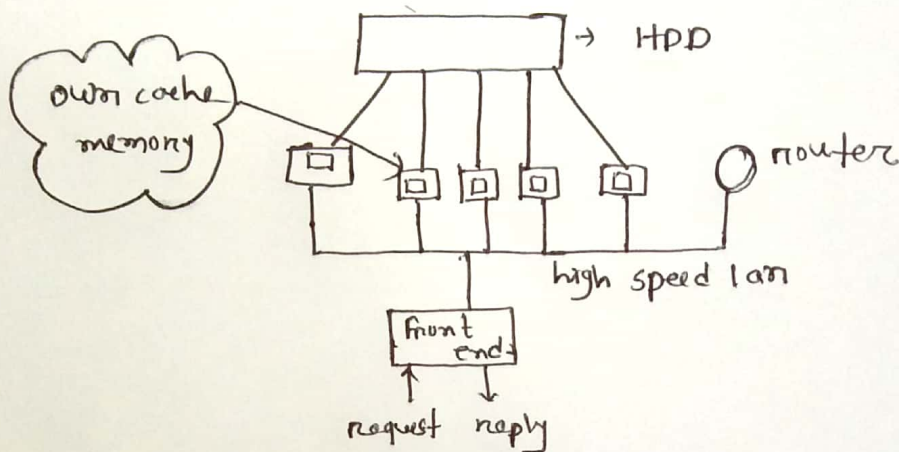Mredul Chakraborty

2017-2-60-069

Ans to the Q-05

In this scenario we can see that this orientation of from doesn't share any cache memory. This has individual cache memory of everyone. But in this case the server can only provide data which on it's own cache. The individual server can not serve the whole data process. This may decrease the service of the form.

To increase the performance we can connect the server with an another share cache and then connect the

cache of every PC with a hand drive and store all of them is a individual server. which will be able to acess the whole data store and any of the individual can use the cache well. Thus using a local hand drive for all the server we can increase the performance of the server form.

Ans to the Q-03

for secnanio -1:

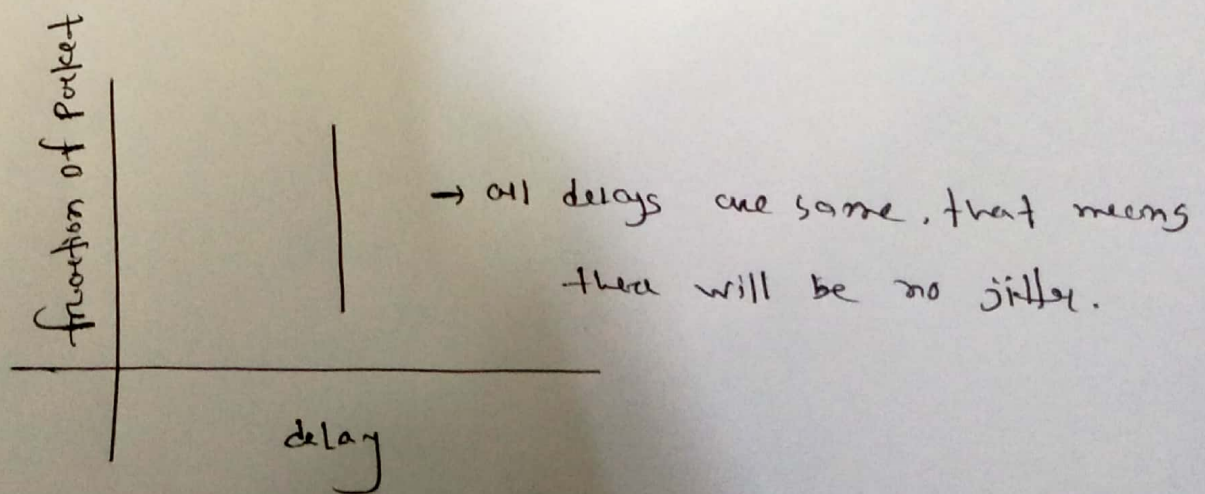fraction of Pnlat

89   90   91
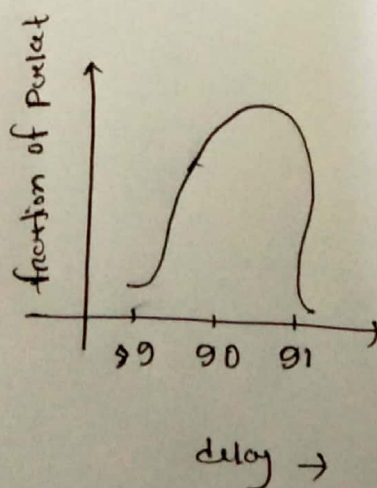
delay →

For scenario-2:
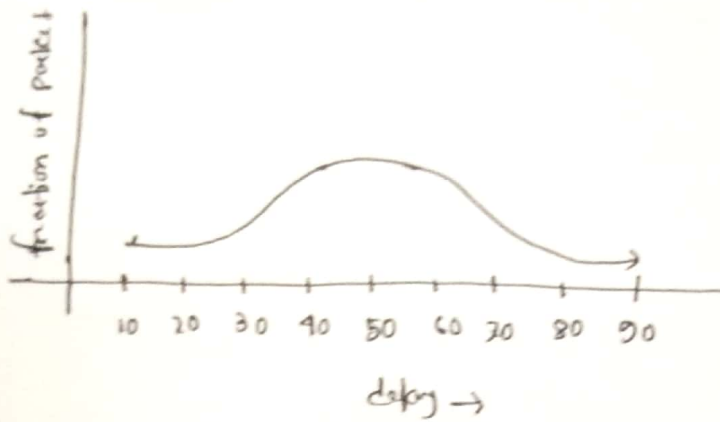
Jiter means the delay variation. The data is send

by the source travel to destination and and received

by the receiver. Delay variation the means the

difference between the delay. If delay variation is

high. then it is called High jitter. and if low

delay variation then low jitter. In multimedia

communication on demand low jitter is required. But

in multimedia communication continous flow of Packet

is required. If one Packet come fast and another

take time then the multimedia communication will face problem such as late round on late video from. Synchronization is important. Delay is not a problem. But ip variation of delay is high then the Problem Occur. So, low jitter is required. In the scenario delay is higher but Variation is quite low. All packet is required within 89-91 (ms).. So low jitter here. But In 2nd scenario delay variation is high (6-90) ms. So, there is high jitter.
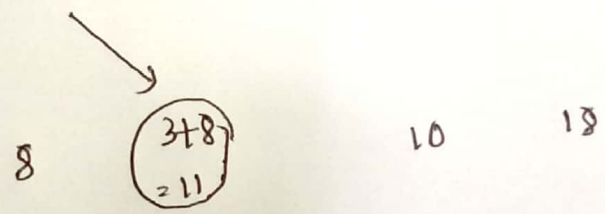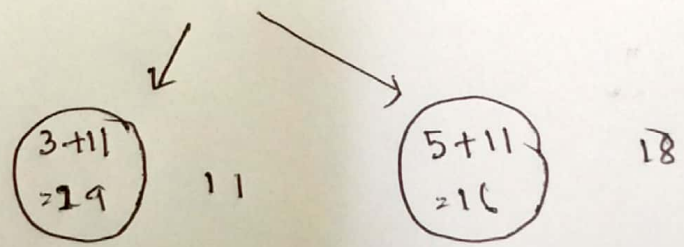

→ all delays are same. that means there will be no jitter.

Ans to the Q-01

$\overset{2}{\underset{F}{\longleftarrow}} \quad \overset{3}{\underset{D}{\longleftarrow}} \quad \overset{5}{\underset{C}{\longleftarrow}} \quad \overset{8}{\underset{B}{\longleftarrow}} \quad \underset{A}{\longrightarrow}$

| | | 5 | 10 | 18 |

up intiady   2

down
1st ex →   (3+5 = 8)   5   10   18

down 2nd
ex →   8   (3+8 = 11)   10   18

dow 3nd →
-ex →   (3+11 = 19)   11   (5+11 = 16)   18

down 4th →
ex   14   (3+19 = 17)   16   (8+16 = 24)

E —2— D —3— C —5— B —8— A
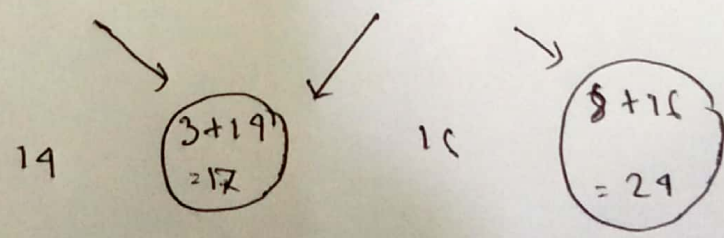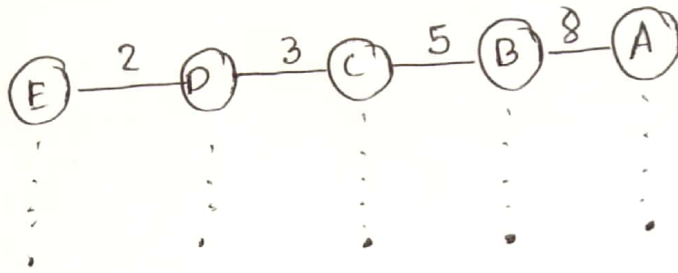
Down
intiatially

up 1st →
ex

up 2nd →
ex

up 3nd →
ex

up 4t →
ex

②

2   3+2
         ≥ 5

2   5   5+5
          ≥10

2   5   10   8+10
   ≥ 18
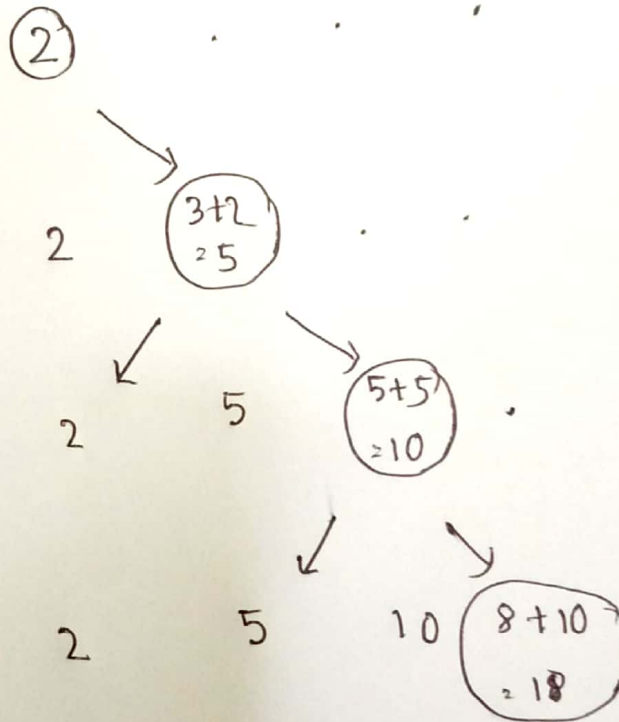
(Ans).

Ans to the Q-2

Leaky bucket Algorithm can help to control the flow which in turn helps network to remmain congestion free.

To Provide good quality of service we use this algorithm, under the traffic shaping. most of the time a host generate a busty amount of data at a time and turn it causes a messy interpretation. In this situation it occure a huge amount of data at a single amount time and not data at a single amount of time for long duration. A leaky bucket algorith is being used to shep this discrimation in a regular flow of data. A leaky bucket algorithm is implemented in Network interface cord (NIC).

Now, the way leaky bucket work is given below,

PC

leaky bucket

D
D
D
D
} regularise

Network
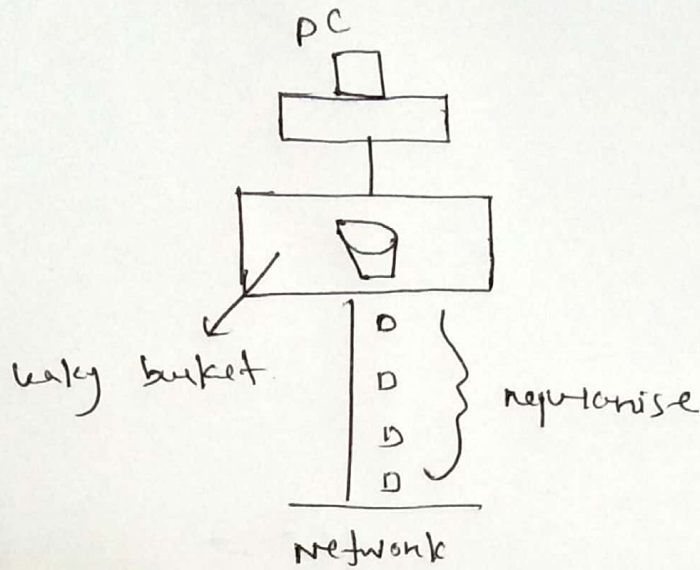
Given that,

Rate = 256 MB/sec

Time = 950 u sec

data = $\frac{256}{1000} \times 950$

= 293.2 MB

where route 32 MB/sec

Now,

time duration = $\frac{data}{Rate}$

= $\frac{293.2 \ MB/s}{32 \ MB/s}$ = $\frac{293.2 \times 1000}{32}$

= 7600 msec

(Ans).

Ans to the Q-9

New threshold = $\frac{1}{2} \times 112$

= 606

Next to consecutive congestion window size

is: 129, 130, 131, 132, 133, 4, 5, 10, 20, 40 kB.