

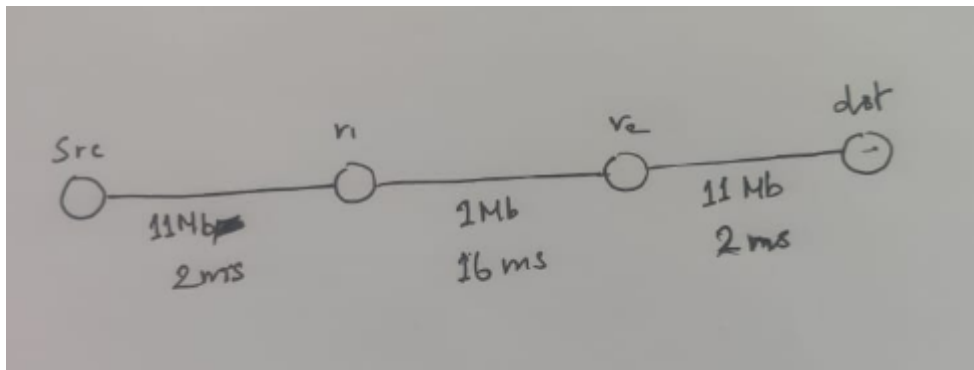
CSLR 52
Networks Lab
Assignment - 2

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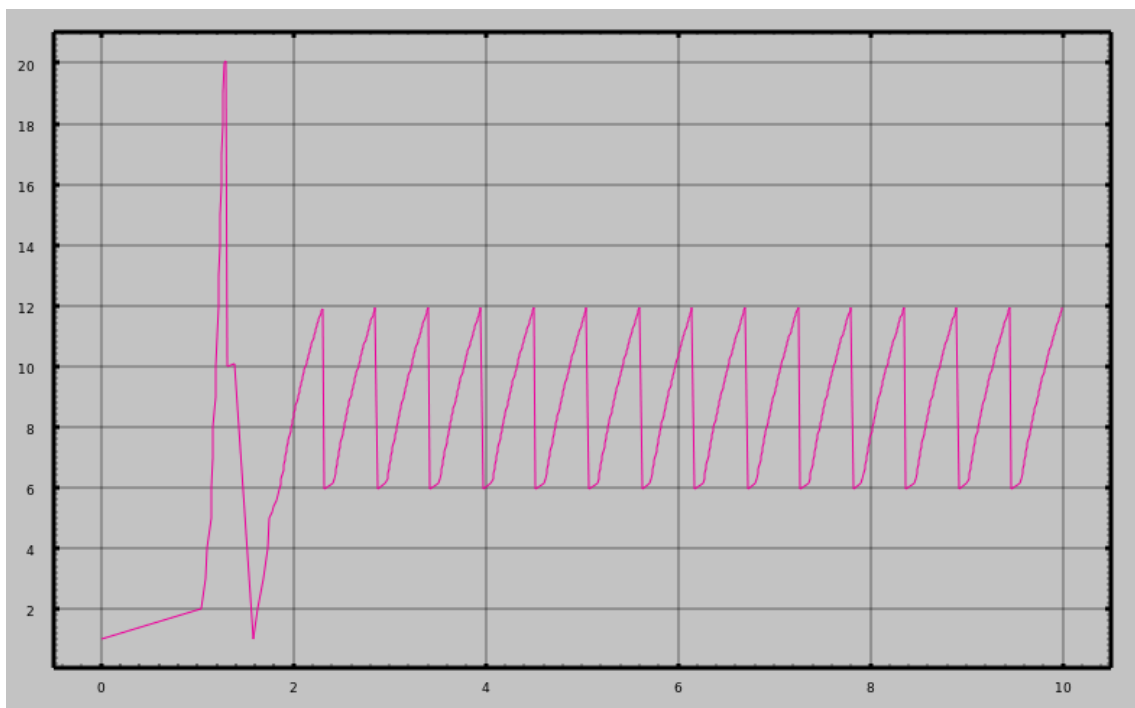
Question 1:

a.

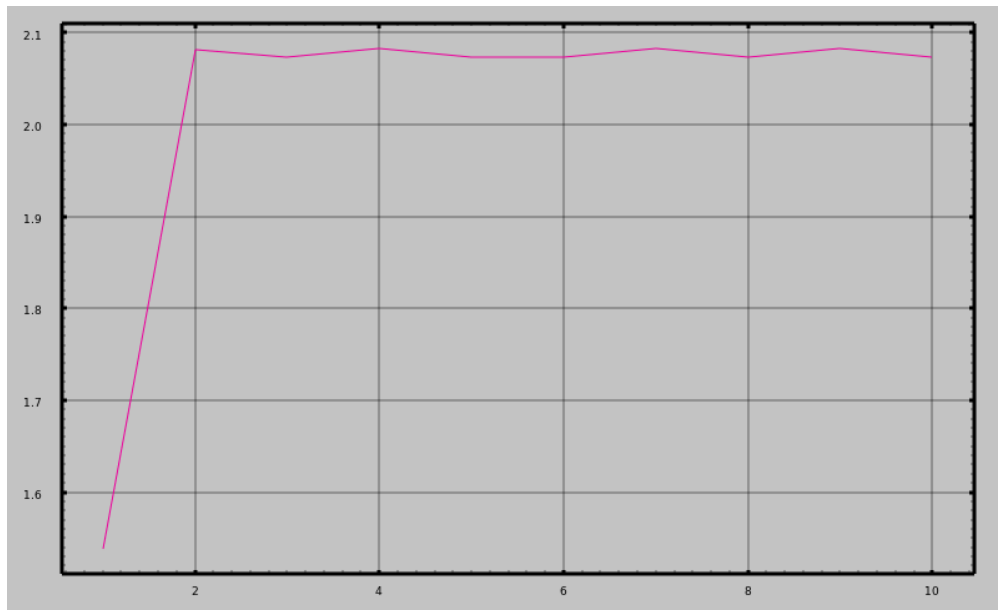


b. DropTail which acts like a simple queue.

c. The slowstart ends at the first peak in the following graph of congestion window vs simulation time.

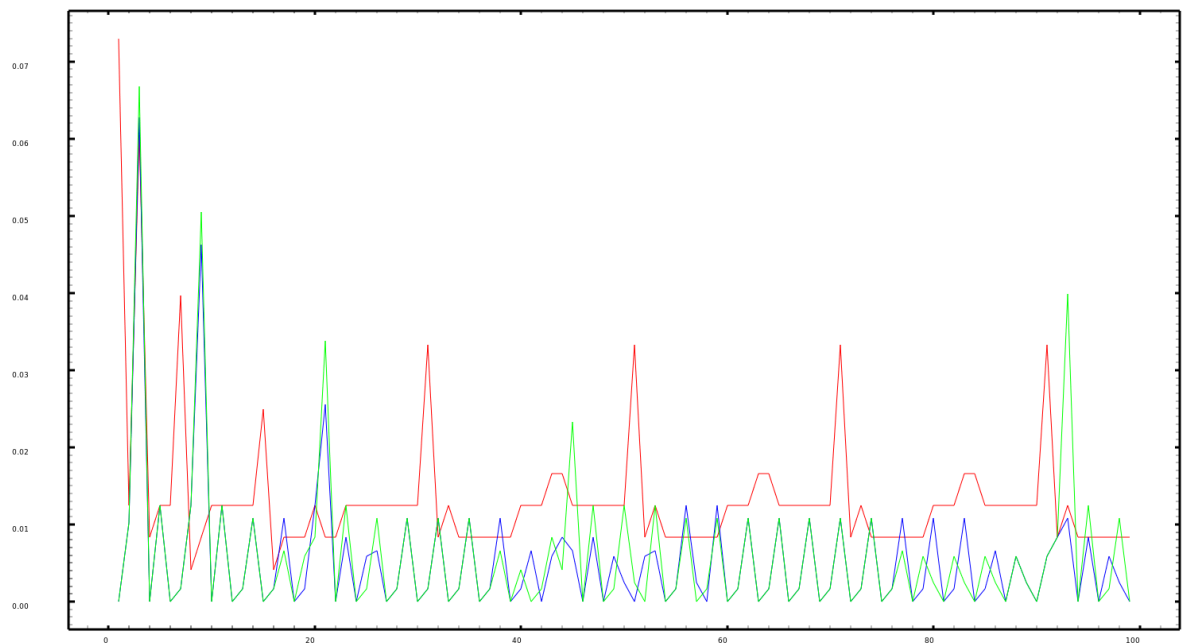


d. The average throughput from the following graph of throughput vs sec is 2.0234879999999995



Question 2:

- a. The following are the average interarrival times and standard deviation for B1, B2, B3



```
root@dipesh:/src# ./process
avg for 3 is 0.013296
std for 3 is 0.00975968
avg for 5 is 0.005392
std for 5 is 0.00866264
avg for 7 is 0.0059728
std for 7 is 0.0101256
root@dipesh:/src#
```

b. Legend:

Red -- B1

Blue -- B2

Green -- B3

c. The middle link limits the bandwidth and hence on reduction of number of nodes on either side, the traffic reduces and hence increases the inter - arrival times. The interarrival times at the beginning are high because tcp sends singular packets at the beginning and then sends more packets at once. If $n = 2,1$ then the overall traffic decreases and the bandwidth is utilized more effectively leading to lesser interarrival times between packets.