## **Computer Networks Assignment 3**

## Throughput calculation

## **Contributors:**

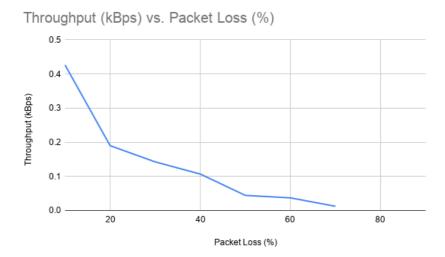
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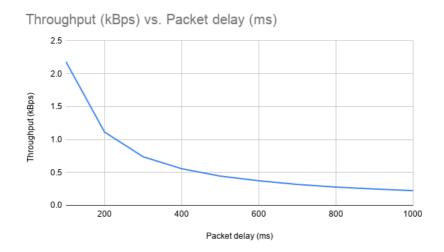
The file transferred was a 10.3 kB text file. Without any network abnormality introduced by the netem tool, we have throughput as 126.5109 kBps.

For Packet Loss,



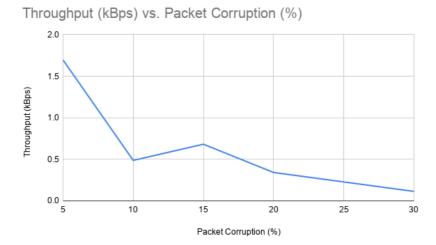
We see that throughput decreases as packet loss increases. Also, for packet loss of 80% onwards, the file transfer ends before the complete file is sent.

For Packet delays,



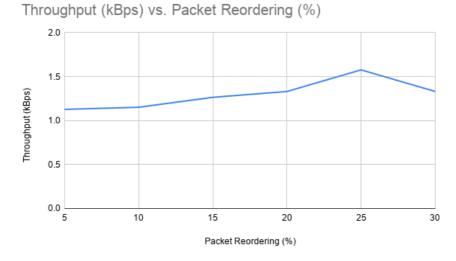
We see that throughput decreases exponentially on increasing packet delays.

On packet corruption,



Throughput varies as packet corruption increases, but the overall effect is the decrease in throughput.

On packet reordering (with a fixed delay of 200ms),



Throughput is seen to increase till 25% packet reordering and then decrease. This may be the case because some of the repeated sequence number packets may get reordered, allowing the correct sequence number packets to reach before them, leading to an increase in throughput.