CS348 Computer Networks

Lab Excercises 7

Indian Institute of Technology, Patna March 21, 2017

Instructions: You have to show the demo to the TA and submit the codes in a tgz file with name labAssign7.tgz. The submission date is 27.03.2017. The current assignment is a continuation of Assignment 6. Reuse your previous codes to save coding efforts.

The objective of this assignment is to compare the performace of the congestion control mechanisms in the TCP-Reno and the CUBIC protocol. Consider the scenarios given in the previous assignment. Assume a host connected to a router is serving two end nodes both of which are connected to the same router but have different link bandwidths. The link bandwidths are taken as input from the user. Further assuming zero propagation delay, draw the following plots based on the simulation results:

- 1. The actual link throughput ratio with respect to the ratio of the link bandwidths for both TCP Reno and CUBIC.
- 2. The percentage throughput with respect to time (may be calculated in terms of RTT) of each of the link for both the protocols.