COMSATS University Islamabad, Lahore Campus
SPRING 2021

Assignment # 3

Data Communication & Computer Networks – Lab

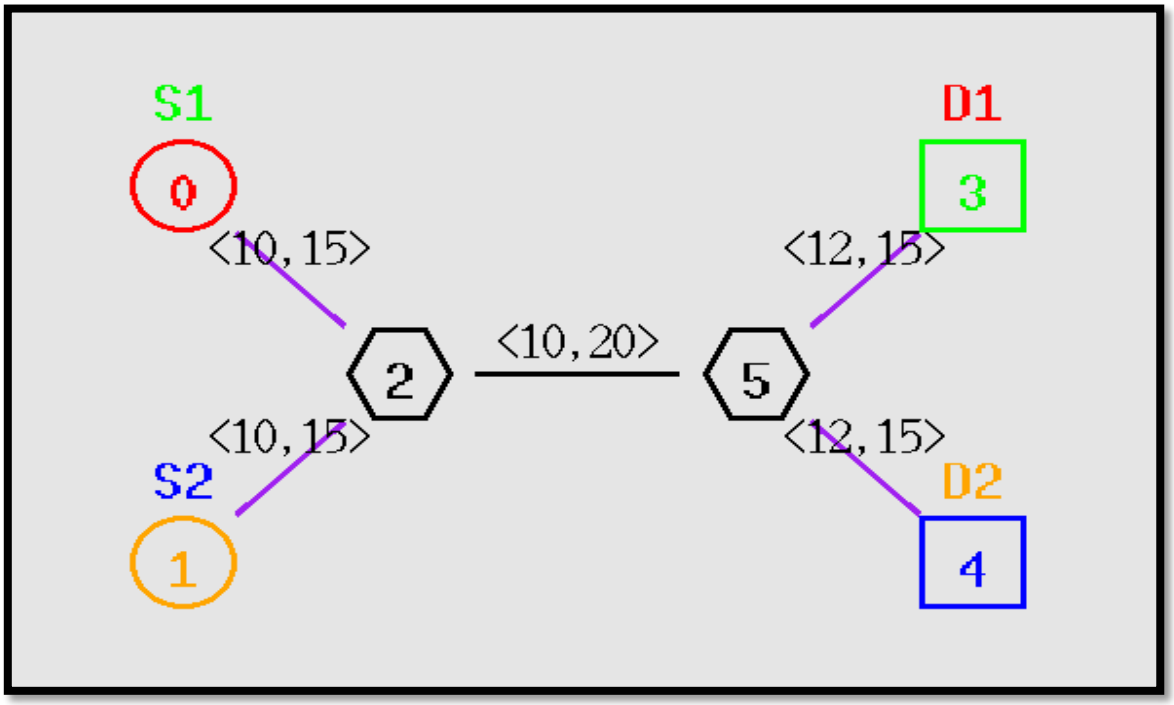
Submission Deadline: 04-05-2021

Question No. 1

[Total Marks: 10]

Write a program in NS2 to build the following topology and give the same attributes to nodes and links. After creating the desired network, you will send the traffic from ***S1 to D1 through FTP over TCP*** and ***S2 to D2 through CBR over UDP***. You will run your simulation for 10 seconds. However, the start time for CBR will be 0.5 sec. and for FTP it will be 1.5 sec., while stop time for both type of traffic will be 9.5 seconds.

Note: In following scenario; the label **<10,15>** shows the Bandwidth and Delay Time of a link while the Queuing algorithm for every link will be **"RED".** There will also be a **queue-limit** of **8packets** on a link between **node2 and node5**.



Submission Instructions

You'll submit a zip folder which includes a word report on the given network along with three files (.tcl, .nam, and .tr). Make sure that you are using your registration ID for all files (.tcl, .nam, and .tr).

In your word report you will add following three items.

1. Code
2. Output
3. Conclusion (In which you will conclude that what differences you observe between TCP & UDP and how these protocols work: mean if you change the bandwidth or delay time of a link then what happens).

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