Semester Project 1

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Network Simulator

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Subject:-Computer Networks Lab

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0.1 AIM

Develop a network simulator implementing entire protocol stack

0.2 Programming Language Used

C++

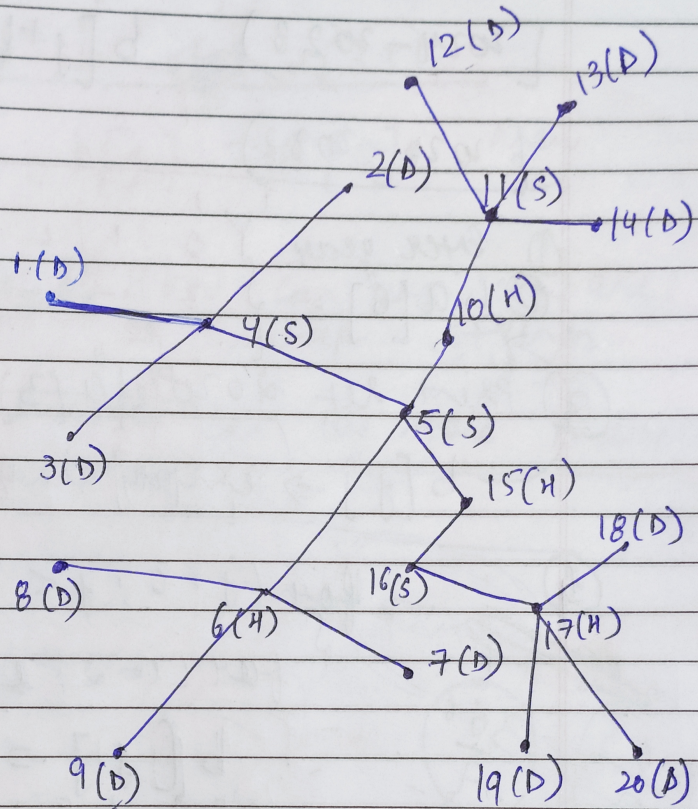## 0.3 Assumptions and Explanations

We created a graph which was based on a topology, we entered number of devices which were device, switch and hub. Then we created connections between them on the basis of undirected graph.

Then we run the query which was the first number was sender, second was receiver and third was the number of packets. Then we printed the whole network path between sender and receiver.

We implemented the error between the sender and receiver through a random function.

Then we added two test cases which are based on the star and othe topologies which were having connections between switch, hub, device.

S : switch
H : Hub
D : Device

No. of queries 1, sending 4 packets from 12 to 1 Device.