TEAM 10 MP5 ECEN 602 Kavya Santha kumar Boyu Li

Report:

The variable parameter for the three cases are:

Case 1:

- src1-R1 and R2-rcv1 end-2-end delay = 5 ms
- src2-R1 and R2-rcv2 end-2-end delay = 12.5 ms Case 2:
- src1-R1 and R2-rcv1 end-2-end delay = 5 ms
- src2-R1 and R2-rcv2 end-2-end delay = 20 ms

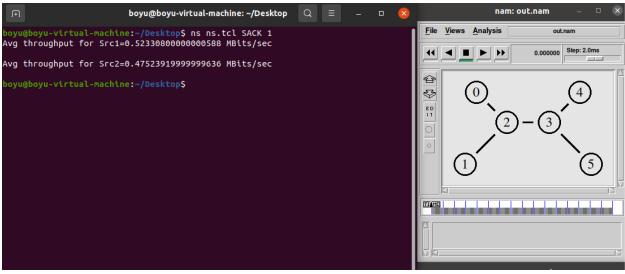
Case 3:

- src1-R1 and R2-rcv1 end-2-end delay = 5 ms
- src2-R1 and R2-rcv2 end-2-end delay = 27.5 ms

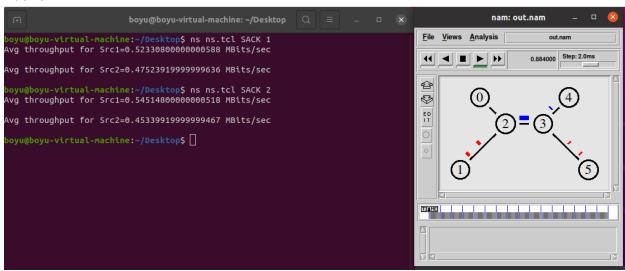
Results:

Screenshots

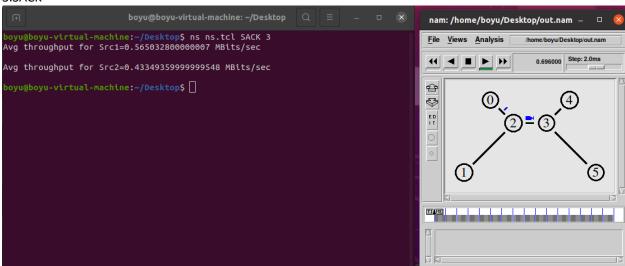
1.SACK1



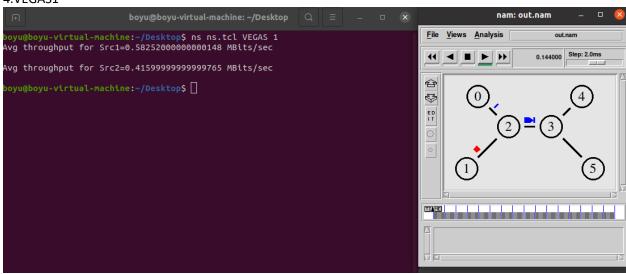
2.SACK2



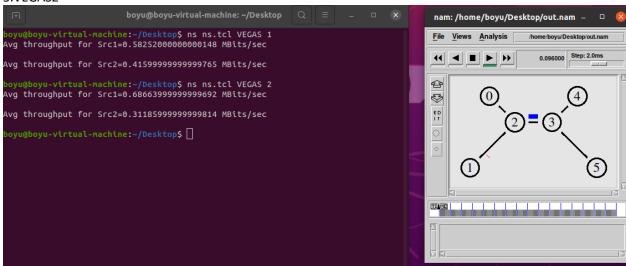
3.SACK



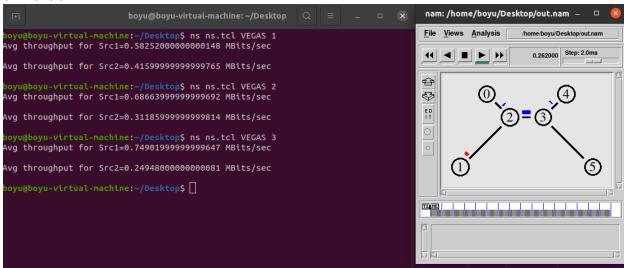
4.VEGAS1



5.VEGAS2



6. VEGAS 3



Throughput ratio and explanation

(i) After running all six cases, the simulation results and the comparisons are listed below :

| TCP_flavor Case | Throughput src1 Mbps | Throughput src2 Mbps | Ratio of throughputs |
|-----------------|----------------------|----------------------|----------------------|
| SACK 1 | 0.523308 | 0.475239 | 1.10114 |
| SACK 2 | 0.545148 | 0.453399 | 1.20235 |
| SACK 3 | 0.565032 | 0.433493 | 1.30343 |
| VEGAS 1 | 0.582520 | 0.415999 | 1.32817 |
| VEGAS 2 | 0.686639 | 0.311859 | 2.20176 |
| VEGAS 3 | 0.749019 | 0.249480 | 3.00232 |