EX NO: 1	
DATE:	**DESIGN AND IMPLEMENT THE NETWORK TOPOLOGIES**

AIM:

To design and implement the network topologies using NETSIM.

SOFTWARE REQIRED:

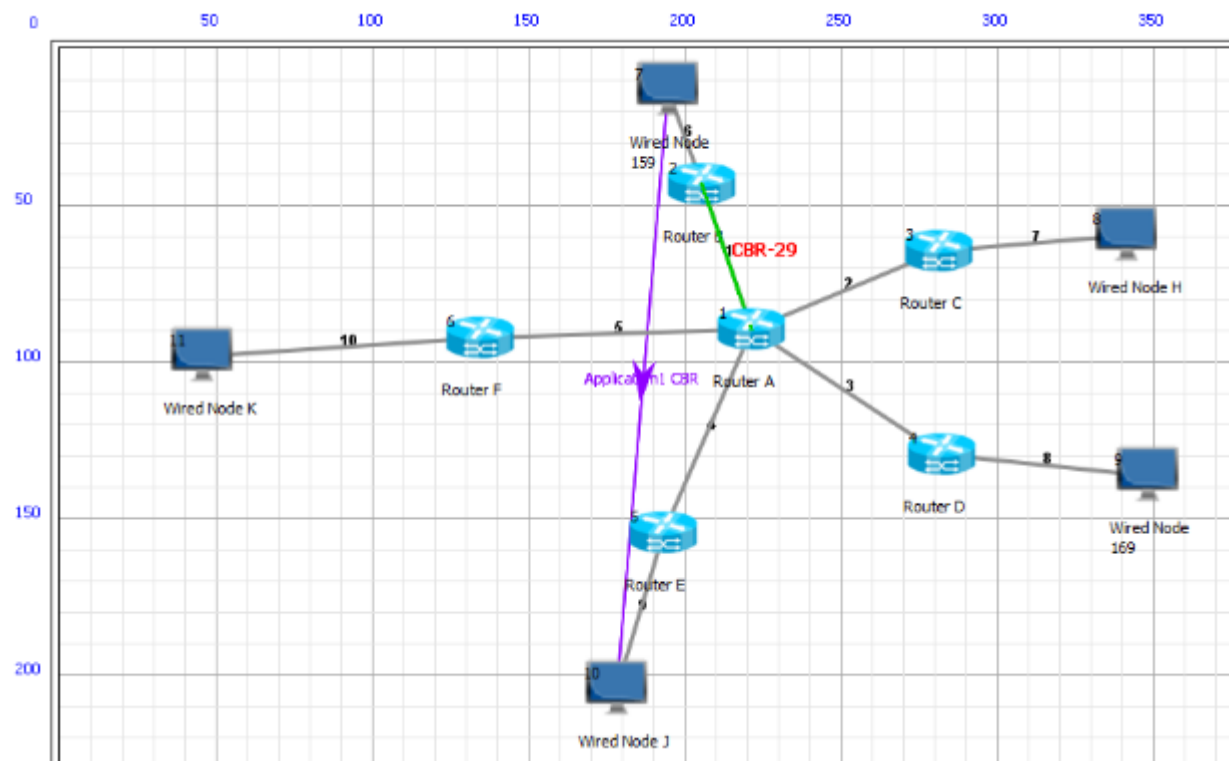NETSIM – Simulation Platform for Network

PROCEDURE:

 • Open the NETSIM software.

 • Select the simulation → Networks → Internetworks

 • Connect the nodes in a typical fashion for analysis

 • Run the simulation

 • Analyze and interpret the obtained network metrics

RESULT:

Thus the design and implementation of network topologies was done successfully.

Roll Number	21ECR169	Course Code	20ECL62
Name	RITHUVARSHINI T	Course Name	Data Communication and Internetworking Laboratory
Experiment No.	1	Experiment Name	DESIGN AND IMPLEMENT NETWORK TOPOLOGIES; STAR, MESH, BUS, RING
Image caption	STAR TOPOLOGY		

NetSim - Simulation - Internetworks

Simulation Programming Basics Utilities **Help**

Performance Metrics

Network Metrics

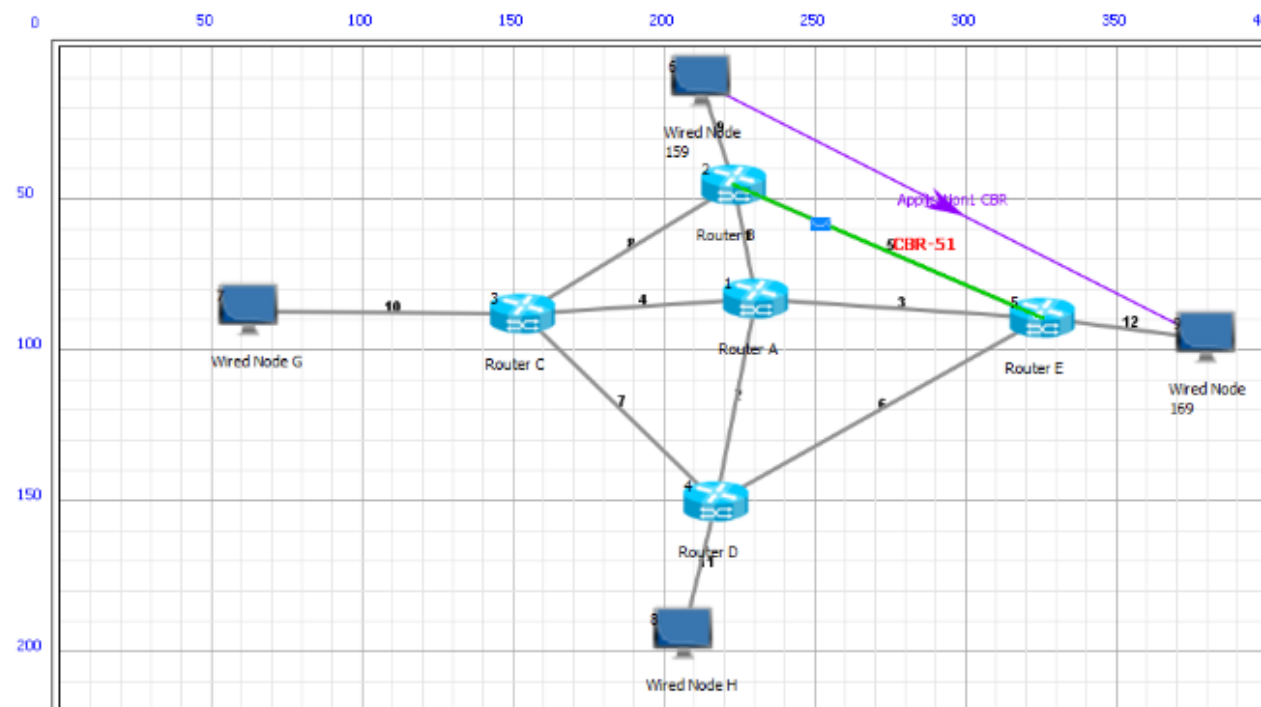- Performance Metrics
  - Network Metrics
  - Link Metrics
  - Queue Metrics
  - TCP Metrics
  - IP Metrics
  - IP Forwarding Table
  - OSPF Metrics
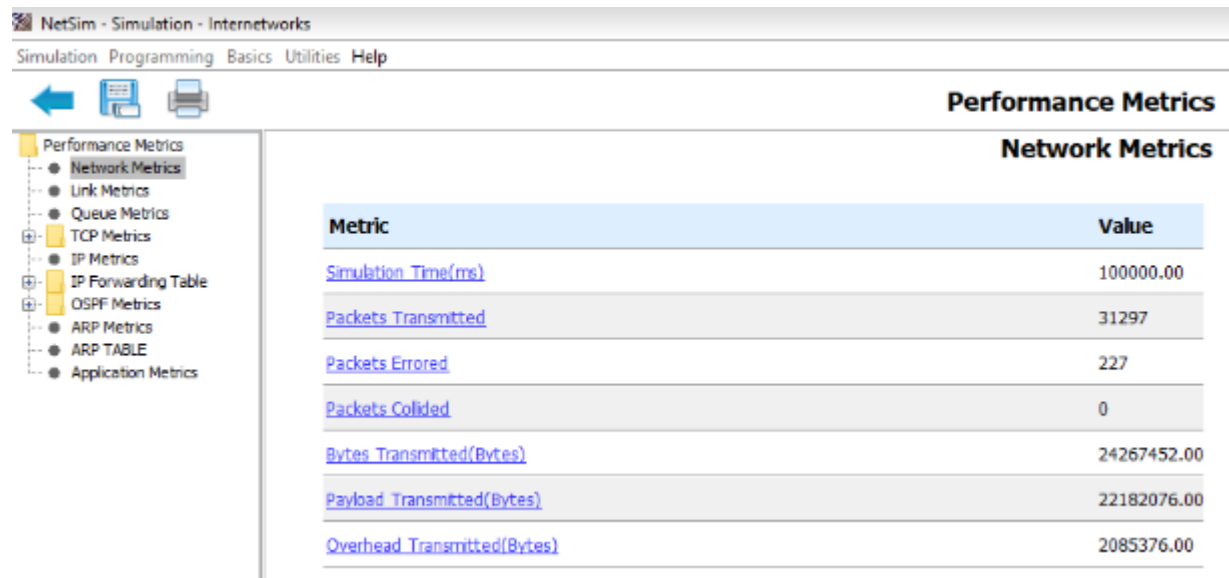 - ARP Metrics
  - ARP TABLE
  - Application Metrics

Metric	Value
Simulation Time(ms)	10000.00
Packets Transmitted	3481
Packets Errored	24
Packets Collided	0
Bytes Transmitted(Bytes)	2458670.00
Payload Transmitted(Bytes)	2242212.00
Overhead Transmitted(Bytes)	216458.00

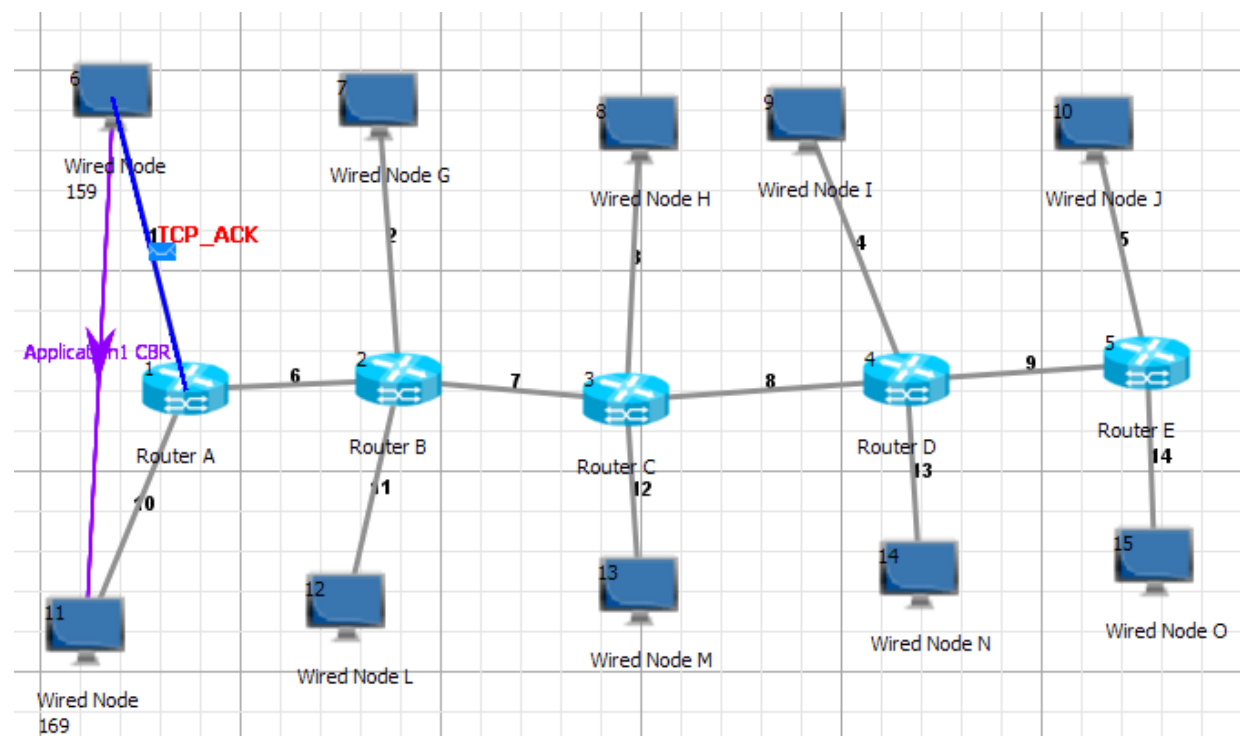| Roll Number	21ECR169	Course Code	20ECL62
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Image caption	MESH TOPOLOGY		

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Image caption	BUS TOPOLOGY		

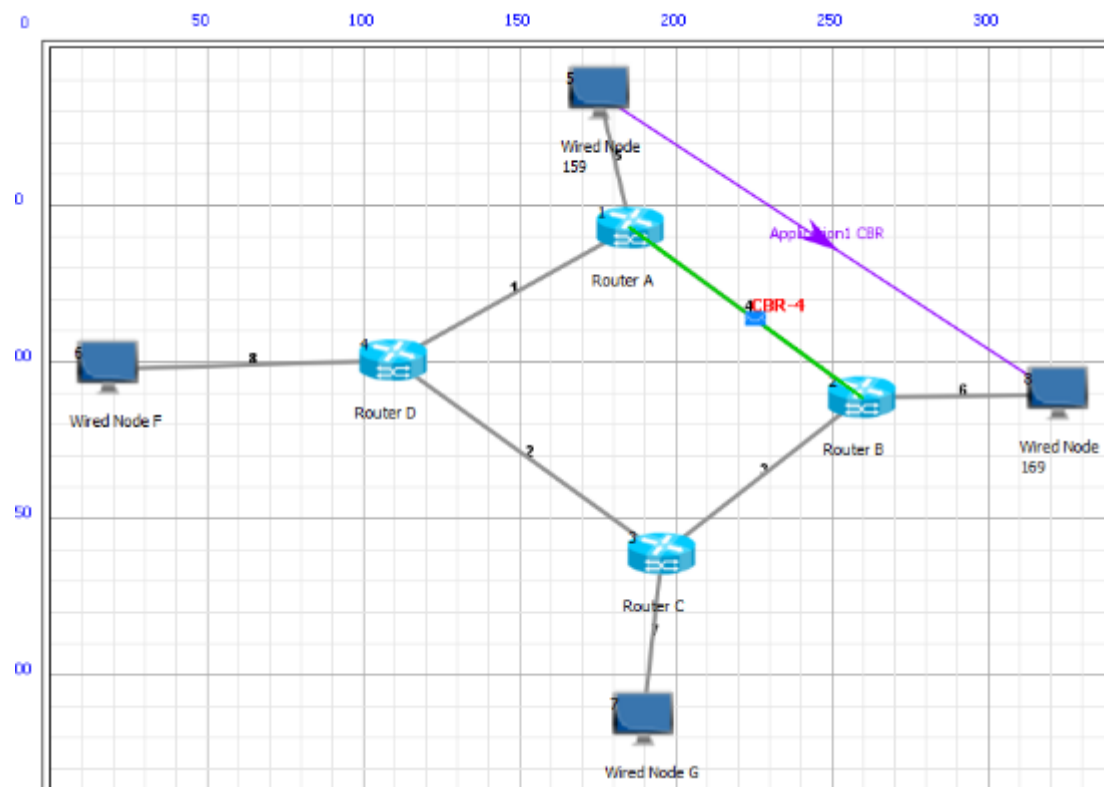| Roll Number	21ECR169	Course Code	20ECL62
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Image caption	BUS TOPOLOGY		

Performance Metrics

Network Metrics

Metric	Value
Simulation Time(ms)	100000.00
Packets Transmitted	21529
Packets Errored	123
Packets Collided	0
Bytes Transmitted(Bytes)	16280646.00
Payload Transmitted(Bytes)	14728232.00
Overhead Transmitted(Bytes)	1552414.00

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Image caption	RING TOPOLOGY		

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Image caption	RING TOPOLOGY		