**EXPERIMENT 2**

**Aim :**

Write a Program for Wired Network Simulation between 3 Source Nodes & 1 Destination Node.

**Code :**

#Create a simulator object

set ns [new Simulator]

#Open the nam trace file

set nf [open out.nam w]

$ns namtrace-all $nf

#Define a 'finish' procedure

proc finish {} {

global ns nf

$ns flush-trace

#Close the trace file

close $nf

#Execute nam on the trace file

exec nam out.nam &

exit 0 }

#Create four nodes

set n0 [$ns node]

set n1 [$ns node]

set n2 [$ns node]

set n3 [$ns node]

#Create a duplex link between nodes n1, n2, n3 and n0

$ns duplex-link $n1 $n0 1Mb 10ms DropTail

$ns duplex-link $n2 $n0 1Mb 10ms DropTail

$ns duplex-link $n3 $n0 1Mb 10ms DropTail

#Create a UDP agent and attach it to nodes n1, n2, n3

set udp1 [new Agent/UDP]

$ns attach-agent $n1 $udp1

set udp2 [new Agent/UDP]

$ns attach-agent $n2 $udp2

set udp3 [new Agent/UDP]

$ns attach-agent $n3 $udp3

#Create a CBR traffic source and attach it to udp1

set cbr1 [new Application/Traffic/CBR]

$cbr1 set packetSize\_ 500

$cbr1 set interval\_ 0.005

$cbr1 attach-agent $udp1

#Create a CBR traffic source and attach it to udp2

set cbr2 [new Application/Traffic/CBR]

$cbr2 set packetSize\_ 500

$cbr2 set interval\_ 0.005

$cbr2 attach-agent $udp2

# Create a CBR traffic source and attach it to udp3

set cbr3 [new Application/Traffic/CBR]

$cbr3 set packetSize\_ 500

$cbr3 set interval\_ 0.005

$cbr3 attach-agent $udp3

#Create a Null agent (a traffic sink) and attach it to node n0

set null0 [new Agent/Null]

$ns attach-agent $n0 $null0

#Connect the traffic source with the traffic sink

$ns connect $udp1 $null0

$ns connect $udp2 $null0

$ns connect $udp3 $null0

#Schedule events for the CBR agent

$ns at 0.5 "$cbr1 start"

$ns at 4.5 "$cbr1 stop"

$ns at 0.5 "$cbr2 start"

$ns at 4.5 "$cbr2 stop"

$ns at 0.5 "$cbr3 start"

$ns at 4.5 "$cbr3 stop"

#Call the finish procedure after 5 seconds of simulation time

$ns at 5.0 "finish"

#Run the simulation

$ns run

**Screen Shots :**



