

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 $udp2
set udp3 [new Agent/UDP]
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$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
```

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Screen Shots :



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File Edit Selection View Go Debug Terminal Help
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

aftab@Dell116:~$ code lab2.tcl
aftab@Dell116:~$ ns lab2.tcl
runnig nam
aftab@Dell116:~$ |
```

