

[2CEIT503 COMPUTER NETWORKS]

Practical: 7

AIM- Implementation of .tcl script in Ns2 .

- a) Write a tcl script to add two nodes and one link (example.tcl).**
- b) Modify example.tcl such that node n0 sends data to node n1.**

Name: Tirth Patel

Enrollment No: 21012011106

Batch: 5C-1



**Ganpat
University**

॥ विद्यया समाजोत्कर्षः ॥

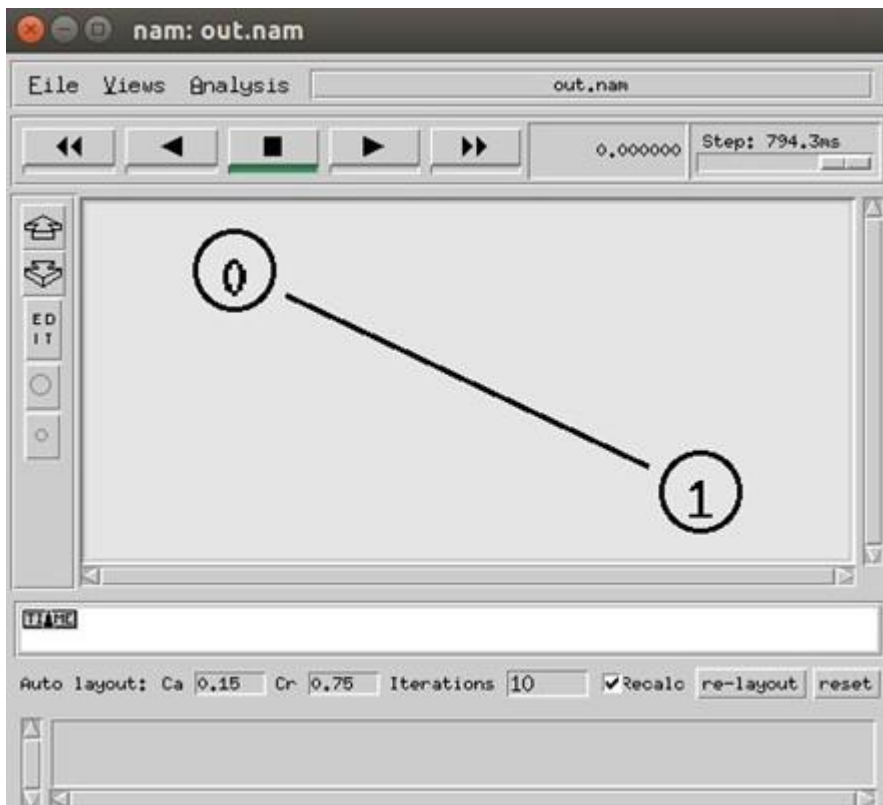
**U.V. Patel
College of
Engineering**

Department of Computer Engineering/Information Technology

Practical-7

a). Write a tcl script to add two nodes and one link.

```
set ns [ new Simulator ]
set nf [ open out.nam w
] $ns namtrace-all $nf
proc finish {} { global
ns nf $ns flush-trace
close $nf
exec nam out.nam &
exit 0 } set n0
[$ns node] set n1
[$ns node]
$ns duplex-link $n0 $n1 1Mb 10ms DropTail
$ns at 5.0 "finish"
$ns run
```



b). Example1b.tcl

```
#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 two nodes set
n0 [$ns node] set n1
[$ns node]

#Create a duplex link between the nodes
$ns duplex-link $n0 $n1 1Mb 10ms DropTail

#Create a UDP agent and attach it to node n0 set
udp0 [new Agent/UDP]
$ns attach-agent $n0 $udp0

# Create a CBR traffic source and attach it to udp0 set
cbr0 [new Application/Traffic/CBR]
$cbr0 set packetSize_ 500
$cbr0 set interval_ 0.005
$cbr0 attach-agent $udp0

#Create a Null agent (a traffic sink) and attach it to node n1 set
null0 [new Agent/Null] $ns
attach-agent $n1 $null0

#Connect the traffic source with the traffic sink
$ns connect $udp0 $null0

#Schedule events for the CBR agent
```

Practical-7

\$ns at 0.5 "\$cbr0 start"

\$ns at 4.5 "\$cbr0 stop"

#Call the finish procedure after 5 seconds of simulation time

\$ns at 5.0 "finish"

#Run the simulation

\$ns run

