2CEIT503: COMPUTER NETWORK

Practical: 9

AIM: Define a ring topology of ten nodes for a dynamic network where the routing adjusts to a link failure.



Department of Computer
Engineering/Information Technology

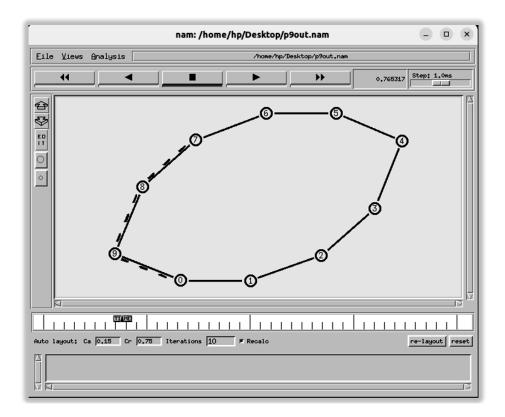
Practical: 9

```
set ns [new Simulator]
$ns rtproto DV
set nf [open p9out.nam w]
$ns namtrace-all $nf
proc finish {} {
     global ns nf
    $ns flush-trace
    close $nf
    exec nam p9out.nam
    exit 0
for {set i 0} {$i<10} {incr i} {
set n($i) [$ns node]
for {set i 0} {$i<10} {incr i} {
$ns duplex-link $n($i) $n([expr ($i+1)%10]) 1Mb 10ms DropTail
set udp0 [new Agent/UDP]
$ns attach-agent $n(0) $udp0
set cbr0 [new Application/Traffic/CBR]
$cbr0 attach-agent $udp0
set null0 [new Agent/Null]
$ns attach-agent $n(7) $null0
$ns connect $udp0 $null0
n \approx 1.0 \text{ down } (9) \approx (8)
$ns rtmodel-at 2.0 up $n(9) $n(8)
$ns at 0.5 "$cbr0 start"
$ns at 4.5 "$cbr0 stop"
$ns at 4.0 "finish"
$ns run
```

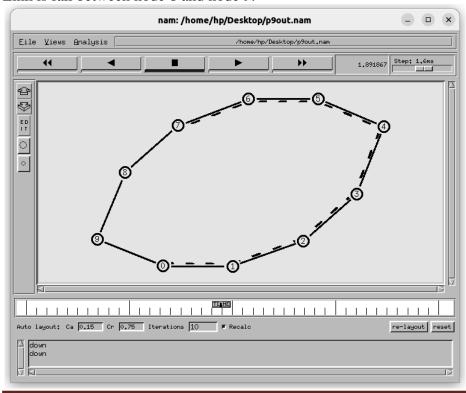
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Output:

Here packet is transfer from node 0 to node 7.



Link is fail between node 8 and node 9.



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