```
#Create a simulator object
set ns[new Simulator]

#Open the nam trace file
set nf [open out.nam w]
$ns namtrace-all $nf

$ns color 1 Blue
$ns color 2 Red


#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
}

# Creating Nodes
set n0 [$ns node]
set n1 [$ns node]
set n2 [$ns node]
set n3 [$ns node]
set n4 [$ns node]
set n5 [$ns node]


#Setting Links
$ns duplex-link $n0 $n2 2Mb 10ms DropTail
$ns duplex-link $n1 $n2 2Mb 10ms DropTail
$ns duplex-link $n2 $n3 0.3Mb 100ms DropTail
$ns duplex-link $n3 $n2 0.3Mb 100ms DropTail
$ns duplex-link $n3 $n4 0.5Mb 40ms DropTail
$ns duplex-link $n3 $n5 0.5Mb 40ms DropTail


#Setting Topology
$ns duplex-link-op $n0 $n2 orient right-down
$ns duplex-link-op $n1 $n2 orient right-up
$ns duplex-link-op $n2 $n3 orient left-up
$ns duplex-link-op $n3 $n2 orient left
$ns duplex-link-op $n3 $n4 orient up
$ns duplex-link-op $n3 $n5 orient right-up

#Setting Queue Limit
$ns queue-limit $n2 $n3 10
```

```
#Setup a TCP connection over 0 and 4 and its flow id, window size, packet size
set tcp [new Agent/TCP/Newreno]
$ns attach-agent $n0 $tcp
set sink [new Agent/TCPSink/DelAck]
$ns attach-agent $n4 $sink
$ns connect $tcp $sink
$tcp set fid_ 1
$tcp set window_ 8000
$tcp set packetSize_ 552

#Setup a FTP over TCP connection
set ftp [new Application/FTP]
$ftp attach-agent $tcp
$ftp set type_ FTP

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

# Create a CBR traffic source and attach it to udp0
set cbr [new Application/Traffic/CBR]
$cbr set type_ CBR
$cbr set packet_size_ 1000
$cbr set rate_ 0.01mb
$cbr set random_ false
$cbr attach-agent $udp


#Create a Null agent (a traffic sink) and attach it to node n1
set null [new Agent/Null]
$ns attach-agent $n5 $null

#Connect the traffic source with the traffic sink
$ns connect $udp $null

#Set Flow ID, Packet Size and Window Size
$udp set fid_ 2
$udp set window_ 8000
$udp set packetSize_ 552

#Start and stop the cbr and  ftp
$ns at 0.1 "$cbr start"
$ns at 1.0 "$ftp start"
$ns at 4.5 "$ftp stop"
$ns at 5.0 "$cbr stop"

#Call the finish procedure after 5 seconds of simulation time
$ns at 5.0 "finish"

#Run the simulation
$ns run
```