set ns [new Simulator]

$ns color 1 Blue

$ns color 2 Red

set nf [open out.nam w]

$ns namtrace-all $nf

proc finish {} {

global ns nf

$ns flush-trace

#Close the NAM trace file

close $nf

#Execute NAM on the trace file

exec nam out.nam &

exit 0

}

set n0 [$ns node]

set n1 [$ns node]

set n2 [$ns node]

set n3 [$ns node]

set n4 [$ns node]

$ns duplex-link $n0 $n2 2Mb 10ms DropTail

$ns duplex-link $n1 $n2 2Mb 10ms DropTail

$ns duplex-link $n2 $n3 1.7Mb 20ms DropTail

$ns duplex-link $n2 $n4 1.7Mb 11ms DropTail

$ns queue-limit $n2 $n3 10

$ns queue-limit $n2 $n4 10

$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 right

$ns duplex-link-op $n2 $n4 orient right-down

$ns duplex-link-op $n2 $n3 queuePos 0.5

$ns duplex-link-op $n2 $n4 queuePos 0.5

set tcp [new Agent/TCP]

set tcp1 [new Agent/TCP]

$tcp set class\_ 2

$ns attach-agent $n0 $tcp

set sink [new Agent/TCPSink]

$ns attach-agent $n3 $sink

$ns attach-agent $n4 $sink

$ns connect $tcp $sink

$tcp set fid\_ 1

set ftp [new Application/FTP]

$ftp attach-agent $tcp

set ftp1 [new Application/FTP]

$ftp1 attach-agent $tcp1

$ftp set type\_ FTP

$ftp1 set type\_ FTP

set udp [new Agent/UDP]

$ns attach-agent $n1 $udp

set null [new Agent/Null]

$ns attach-agent $n3 $null

$ns attach-agent $n4 $null

$ns connect $udp $null

$udp set fid\_ 2

set cbr [new Application/Traffic/CBR]

$cbr attach-agent $udp

$cbr set type\_ CBR

$cbr set packet\_size\_ 1000

$cbr set rate\_ 1mb

$cbr set random\_ false

$ns at 0.1 "$cbr start"

$ns at 1.0 "$ftp start"

$ns at 4.0 "$ftp stop"

$ns at 4.5 "$cbr stop”

$ns at 5.0 "$cbr stop"

$ns at 5.0 "$ns detach-agent $n0 $tcp ; $ns detach-agent $n3 $sink"

$ns at 5.5 "finish"

#Print CBR packet size and interval

puts "CBR packet size = [$cbr set packet\_size\_]"

puts "CBR interval = [$cbr set interval\_]"

$ns run