Program 3

The program creates a network simulation with two nodes connected by a 1Mbps duplex link

```
#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 node
 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 ti 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 (atraffic sink) and attach it to node n1
set null0 [new Agent/Null]
$ns attach-agent $n1 $null0

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

#schedule events for the cbr agent
$ns at 0.5 "$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
```