```
set ns [new Simulator]



set nt [open lab02prog32.tr w]
$ns trace-all $nt



set nf [open lab02prog32.nam w]
$ns namtrace-all $nf



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



$n0 label "ping0"
$n1 label "ping1"
$n2 label "ping2"
$n3 label "ping3"
$n4 label "ping4"
$n5 label "router"
$ns duplex-link $n0 $n5 1Mb 10ms DropTail
$ns duplex-link $n1 $n5 1Mb 10ms DropTail
$ns duplex-link $n2 $n5 1Mb 10ms DropTail
$ns duplex-link $n3 $n5 1Mb 10ms DropTail
$ns duplex-link $n4 $n5 1Mb 10ms DropTail
```

```
$ns queue-limit $n0 $n5 5
$ns queue-limit $n1 $n5 5
$ns queue-limit $n2 $n5 2
$ns queue-limit $n3 $n5 5
$ns queue-limit $n4 $n5 2


$ns color 2 Red
$ns color 3 Blue
$ns color 4 Green
$ns color 5 Yellow


Agent/Ping instproc recv {from rtt} {
$self instvar node_
puts "node [$node_ id] received ping answer from $from with round-trip time $rtt ms"
}
set p0 [new Agent/Ping]
$ns attach-agent $n0 $p0
$p0 set class_ 1


set p1 [new Agent/Ping]
$ns attach-agent $n1 $p1
$p1 set class_ 2


set p2 [new Agent/Ping]
$ns attach-agent $n2 $p2
$p2 set class_ 3
```

```
set p3 [new Agent/Ping]
$ns attach-agent $n3 $p3
$p3 set class_ 4

set p4 [new Agent/Ping]
$ns attach-agent $n4 $p4
$p4 set class_ 5

$ns connect $p2 $p4
$ns connect $p3 $p4
proc sendPingPacket {} {
global ns p2 p3

set intervalTime 0.001
set now [$ns now]
$ns at [expr $now + $intervalTime] "$p2 send"
$ns at [expr $now + $intervalTime] "$p3 send"
$ns at [expr $now + $intervalTime] "sendPingPacket"
}

proc finish {} {
global ns nt nf
$ns flush-trace
close $nt
close $nf
exec nam lab02prog32.nam &
```

```
exit 0
}

$ns at 0.1 "sendPingPacket"
$ns at 2.0 "finish"
$ns run
```