**Question 1**

set ns [new Simulator]

set tracefile [open wired.tr w]

$ns trace-all $tracefile

set namfile [open wired.nam w]

$ns namtrace-all $namfile

set n0 [$ns node]

set n1 [$ns node]

set n2 [$ns node]

set n3 [$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

set udp [new Agent/UDP]

set null [new Agent/Null]

$ns attach-agent $n0 $udp

$ns attach-agent $n1 $null

$ns attach-agent $n2 $null

$ns connect $udp $null

set tcp [new Agent/TCP]

set sink [new Agent/TCPSink]

$ns attach-agent $n2 $tcp

$ns attach-agent $n3 $sink

$ns connect $tcp $sink

set cbr [new Application/Traffic/CBR]

$cbr attach-agent $udp

set ftp [new Application/FTP]

$ftp attach-agent $tcp

$ns at 1.0 "$cbr start"

$ns at 2.0 "$ftp start"

$ns at 10.0 "finish"

proc finish {} {

global ns tracefile namfile

$ns flush-trace

close $tracefile

close $namfile

exit 0

}

puts "Simulation is starting..."

$ns run