LAB-1: NS-2

Tcl code:

```
set ns [new Simulator]

set ta [open out.tr w]
$ns trace-all $ta

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

proc finish {} {
        global ns nf ta
        $ns flush-trace
        #Close the NAM trace file
        close $ta
        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]

$ns duplex-link $n0 $n1 5Mb 2ms DropTail
$ns duplex-link $n0 $n2 10Mb 3ms DropTail

$ns queue-limit $n0 $n1 2

#tcp connection from n0 to n1
set tcp [new Agent/TCP]
$ns attach-agent $n0 $tcp

set sink [new Agent/TCPSink]
$ns attach-agent $n1 $sink

$ns connect $tcp $sink

#ftp over tcp
set ftp [new Application/FTP]
$ftp attach-agent $tcp
$ftp set type_ FTP
```

```
$ns at 0.4 "$ftp start"
$ns at 3.4 "$ftp stop"

$ns at 4.0 "finish"

$ns run
```

Awk script code:

```
{
   if($1 == "d")
   {
          drop++;
   }
}

END{
   print "Number of  packets dropped=" drop
}
```

Output: