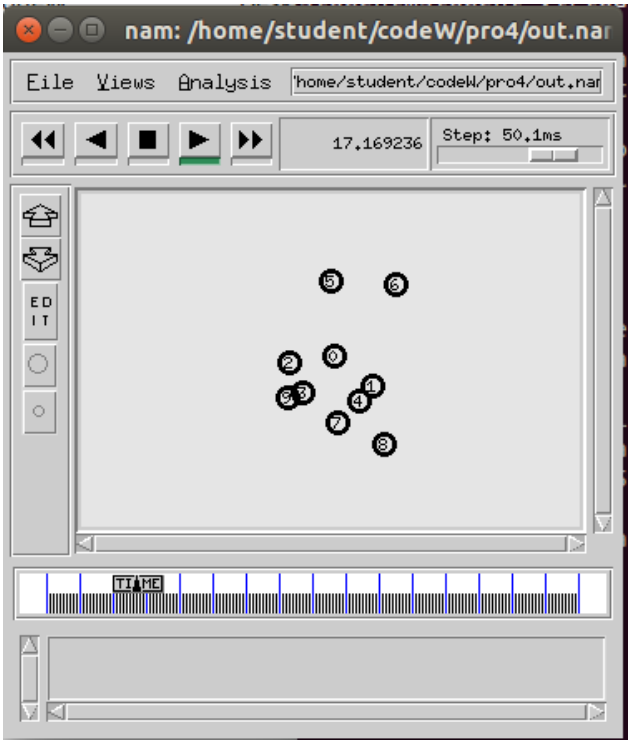
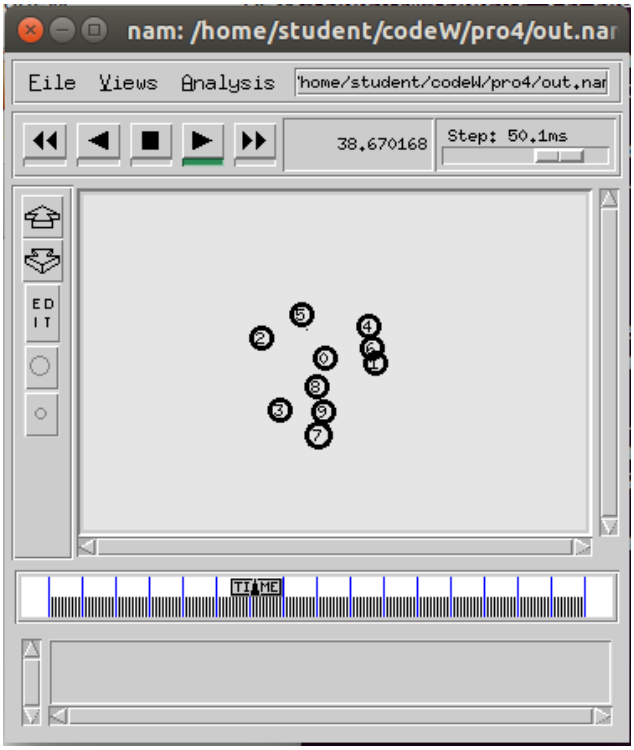
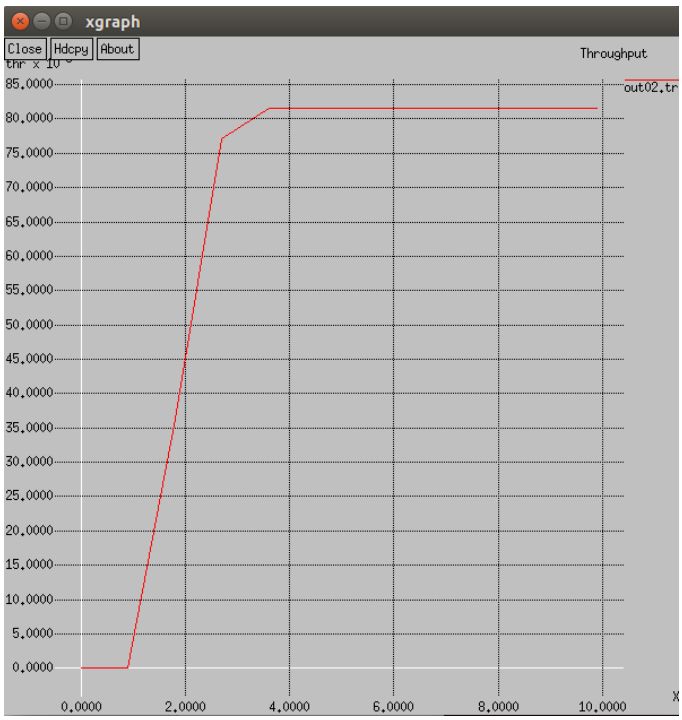
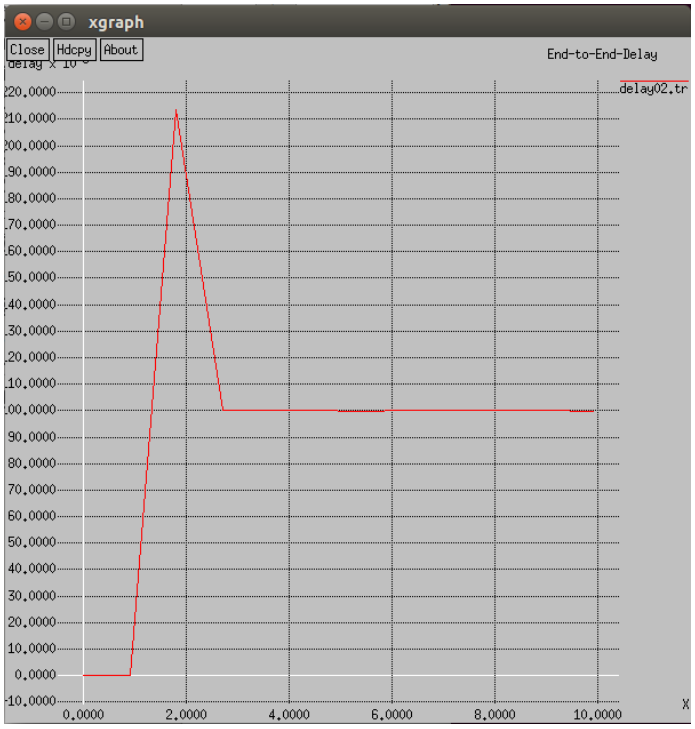


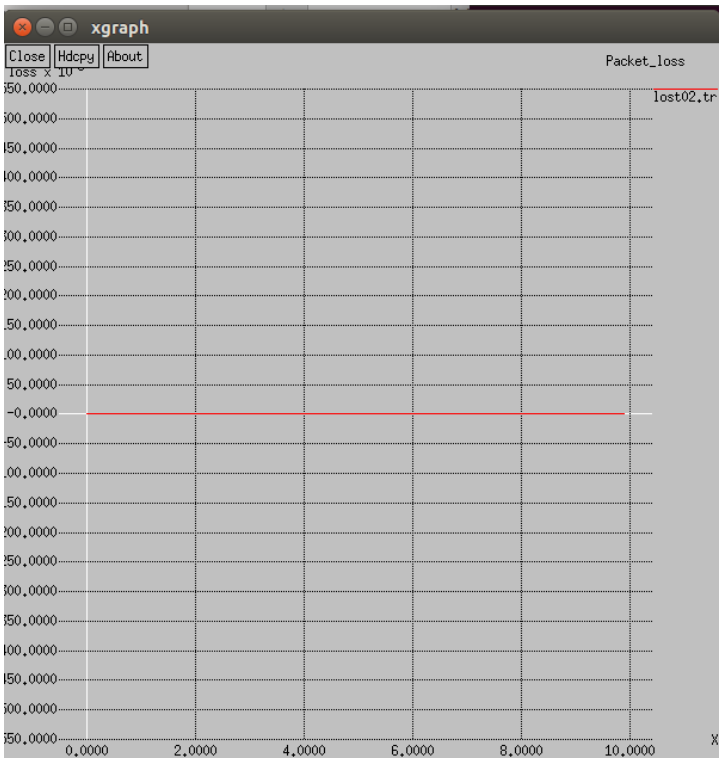


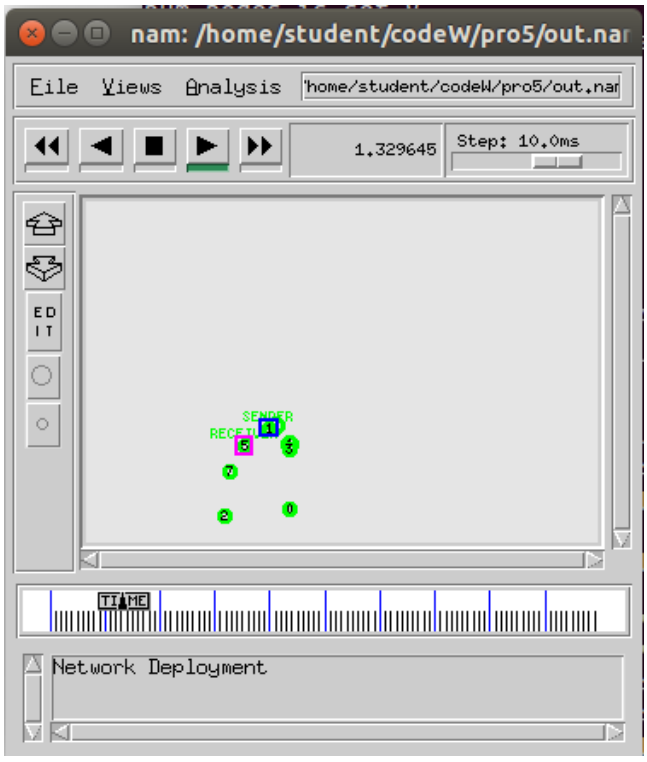

```
student@student-virtual-machine: ~/codeW/pro4
student@student-virtual-machine:~/codeW/pro3$ cd ..
student@student-virtual-machine:~/codeW$ cd pro4
student@student-virtual-machine:~/codeW/pro4$ ls
4.awk  4.tcl
student@student-virtual-machine:~/codeW/pro4$ ns 4.tcl
Commad: <ScriptName>.tcl <Number_of_Nodes>
    while executing
"error "Commad: <ScriptName>.tcl <Number_of_Nodes>""
    invoked from within
"if {$argc != 1} {
        error "Commad: <ScriptName>.tcl <Number_of_Nodes>"
        exit 0
}"
    (file "4.tcl" line 3)
student@student-virtual-machine:~/codeW/pro4$ ns 4.tcl 10
num_nodes is set 10
INITIALIZE THE LIST xListHead
channel.cc:sendUp - Calc highestAntennaZ_ and distCST_
highestAntennaZ_ = 1.5,  distCST_ = 550.0
SORTING LISTS ...DONE!
student@student-virtual-machine:~/codeW/pro4$ the throughput is:6543
03030303.030396
```

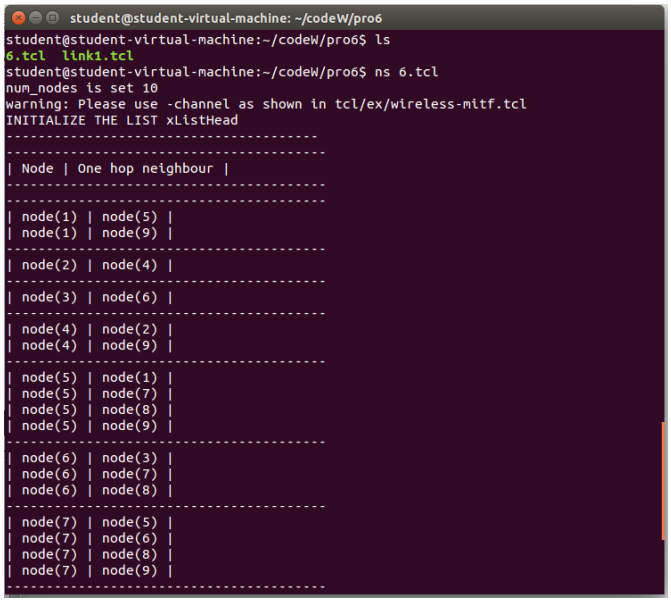
```
student@student-virtual-machine: ~/codeW/pro5
student@student-virtual-machine:~/codeW$ cd pro5
student@student-virtual-machine:~/codeW/pro5$ ls
5.tcl  link.tcl
student@student-virtual-machine:~/codeW/pro5$ ns 5.tcl
Enter number of nodes
8
num_nodes is set 8
Warning: Please use -channel as shown in tcl/ex/wireless-mitf.tcl
INITIALIZE THE LIST xListHead
Loading connection pattern...
Loading scenario file...
Enter source node
1
Enter destination node
5
Starting Simulation...
channel.cc:sendUp - Calc highestAntennaZ_ and distCST_
highestAntennaZ_ = 1.5,  distCST_ = 550.0
SORTING LISTS ...DONE!
NS EXITING...
student@student-virtual-machine:~/codeW/pro5$ Warning:  cannot open file `TIME'
Warning:  cannot open file `800x400'
Parameter LabelFont: can't translate `helvetica-10' into a font (defaulting to `
fixed')
Parameter TitleFont: can't translate `helvetica-18' into a font (defaulting to `
fixed')
Warning:  cannot open file `TIME'
Warning:  cannot open file `TIME'
Warning:  cannot open file `800x400'
Warning:  cannot open file `800x400'
Parameter LabelFont: can't translate `helvetica-10' into a font (defaulting to `
fixed')
Parameter LabelFont: can't translate `helvetica-10' into a font (defaulting to `
fixed')
Parameter TitleFont: can't translate `helvetica-18' into a font (defaulting to `
```

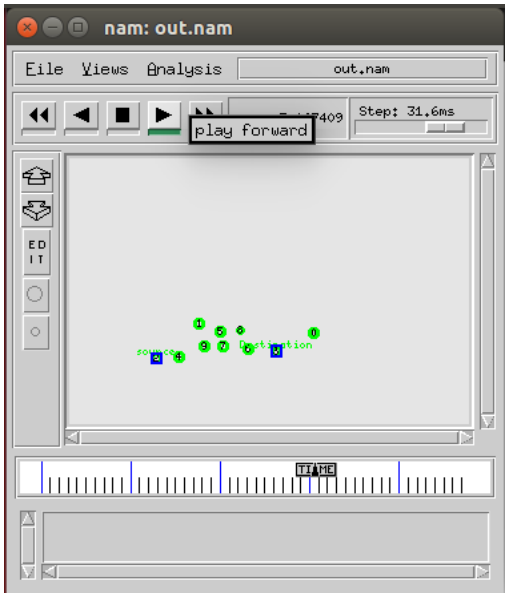

xgraph
Close
Hdcpy
About
Throughput
out02.tr
thr x 10
85.0000
80.0000
75.0000
70.0000
65.0000
60.0000
55.0000
50.0000
45.0000
40.0000
35.0000
30.0000
25.0000
20.0000
15.0000
10.0000
5.0000
0.0000
0.0000
2.0000
4.0000
6.0000
8.0000
10.0000
X

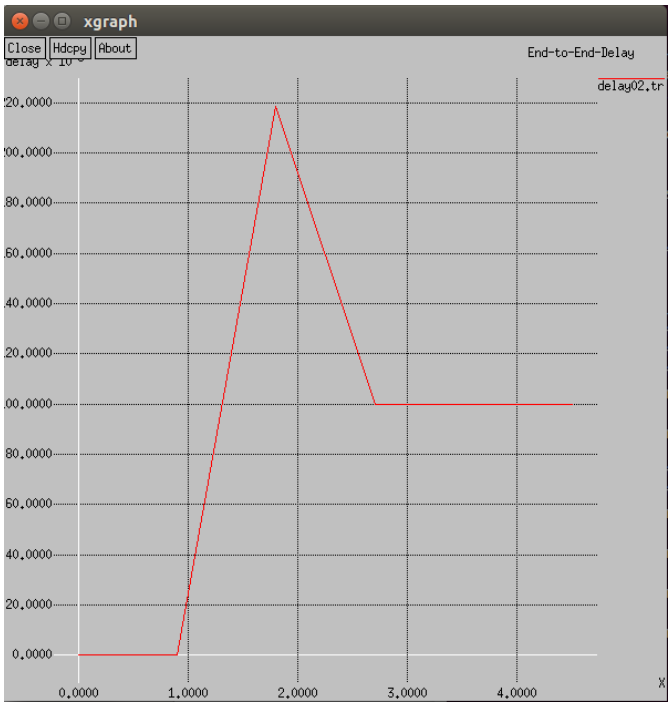

xgraph
Close
Hdcpy
About
End-to-End-Delay
delay02.tr
delay x 10
220.0000
210.0000
200.0000
190.0000
180.0000
170.0000
160.0000
150.0000
140.0000
130.0000
120.0000
110.0000
100.0000
90.0000
80.0000
70.0000
60.0000
50.0000
40.0000
30.0000
20.0000
10.0000
0.0000
-10.0000
0.0000
2.0000
4.0000
6.0000
8.0000
10.0000
X

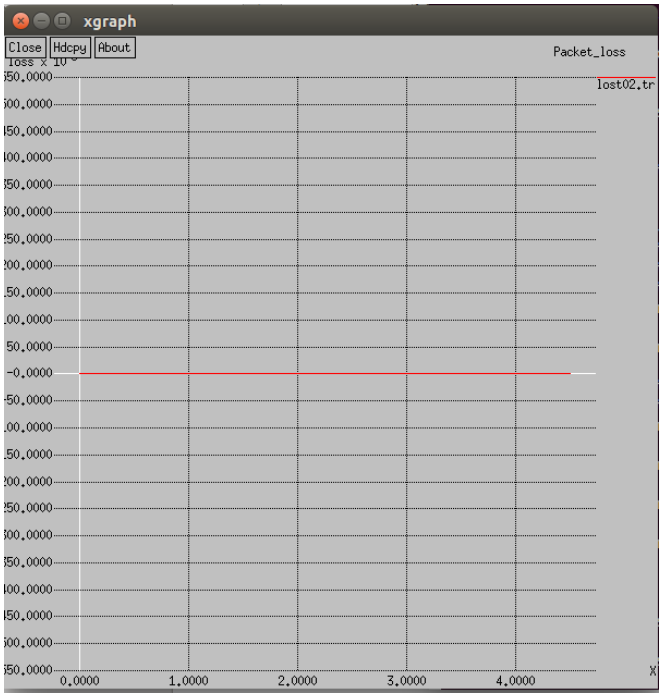

xgraph
Close
Hdcpy
About
Packet_loss
lost02.tr
loss x 10
0.0000
2.0000
4.0000
6.0000
8.0000
10.0000
X

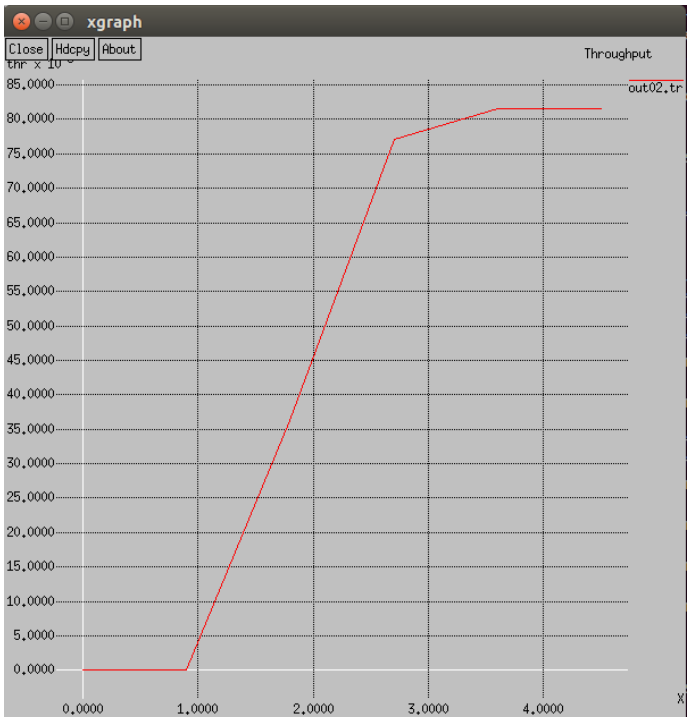

nam: /home/student/codeW/pro5/out.nam
Eile
Views
Analysis
/home/student/codeW/pro5/out.nam
1.329645
Step: 10.0ms
ED
IT
SENDER
TIME
Network Deployment


student@student-virtual-machine: ~/codeW/pro6
student@student-virtual-machine:~/codeW/pro6$ ls
6.tcl link1.tcl
student@student-virtual-machine:~/codeW/pro6$ ns 6.tcl
num_nodes is set 10
warning: Please use -channel as shown in tcl/ex/wireless-mitf.tcl
INITIALIZE THE LIST xListHead
Node	One hop neighbour
node(1)	node(5)
node(1)	node(9)
node(2)	node(4)
node(3)	node(6)
node(4)	node(2)
node(4)	node(9)
node(5)	node(1)
node(5)	node(7)
node(5)	node(8)
node(5)	node(9)
node(6)	node(3)
node(6)	node(7)
node(6)	node(8)
node(7)	node(5)
node(7)	node(6)
node(7)	node(8)
node(7)	node(9)


nam: out.nam
Eile Views Analysis
out.nam
play forward
Step: 31.6ms
TIME


xgraph
Close Hdcpy About
End-to-End-Delay
delay02.tr
0.0000
1.0000
2.0000
3.0000
4.0000


xgraph
Close Hdcpy About
Packet_loss
lost02.tr
0.0000
1.0000
2.0000
3.0000
4.0000


xgraph
Close Hdcpy About
Throughput
out02.tr
0.0000
1.0000
2.0000
3.0000
4.0000