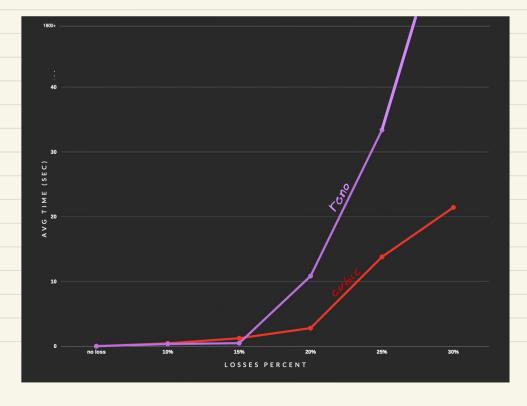
Path 209366970 2061 11018 209369289 MNZ 972

Losses Percent	"Cubic" algorithm	"reno" algorithm
No loss	0.002450 500	0.001567 Sec
10.1°	0.438419 560	0.335935 500
\ <u>\</u> \.	1.225414 560	0.465378 580
20.1.	2.792240 50	10 th 9962 sec
٦< ١٠	13.790518 suc	33.380596 560
2° 1.	21.423521 Sec	nore then 40 m



ניתן ארשיר כי שלגורים "סחשד" ותר אד משלגוריתם "גולמט" עד מישו גייוני פקטה אך הפתם הצמנים רילא די קלן , נג מי 20 שיבור פקטות "גולמט" החבר ותר טוב מ "סחשד" דופער פנור בהפתם למנים לגולים משוב

Screen shots

No (055

```
udv/Communication & computer/Ex4S ./measure
 successfuly created socket
                                                                                                                                      successfully created socket
 successfuly made bind
                                                                                                                                      successfuly connected to server
listening...
connected to client
                                                                                                                                   upload file number 1 - size of 1022976 bytes
upload file number 2 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
upload file number 4 - size of 1022976 bytes
upload file number 5 - size of 1022976 bytes
read file number 1 - size of 1022976 bytes
read file number 2 - size of 1022976 bytes
read file number 3 - size of 1022976 bytes
read file number 4 - size of 1022976 bytes
                                                                                                                                      5 files are successfully sent in a cubic algorithm
 read file number 5 - size of 1022976 bytes
                                                                                                                                      **** Algorithm changed to reno ****
the avg for cubic Algorithm is: 0.002450 seconds
***** Algorithm changed to reno *****
                                                                                                                                     upload file number 1 - size of 1022976 bytes
                                                                                                                                     upload file number 2 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
upload file number 4 - size of 1022976 bytes
upload file number 5 - size of 1022976 bytes
read file number 1 - size of 1022976 bytes
read file number 2 - size of 1022976 bytes
read file number 3 - size of 1022976 bytes
read file number 4
                              - size of 1022976 bytes
                                                                                                                                       5 files are successfuly sent in a reno algorithm
read file number 5 - size of 1022976 bytes
                                                                                                                                      client disconnected from server
the avg for reno Algorithm is: 0.001567 seconds server disconnected from client
```

to 1. hosses

```
arak@barak:~/Desktop/Study/Communication & computer/Ex4$ sudo tc qdisc add dev
lo root netem loss 10%
[sudo] password for barak:
                                                                                                                                                      successfully created socket
successfuly connected to server
                                           udy/Communication & computer/Ex4$ sudo tc qdisc change d
                                                                                                                                                      upload file number 1 - size of 1022976 bytes
upload file number 2 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
ev lo root netem loss 10%
barak@barak:~/Desktop/study/Communication & computer/Ex4$ ./measure
successfuly created socket
                                                                                                                                                    upload file number 4 - stze of 1022976 bytes
upload file number 5 - stze of 1022976 bytes
5 files are successfully sent in a cubic algorithm
listening...
connected to client
read file number 1 - size of 1022976 bytes
read file number 2 - size of 1022976 bytes
read file number 3 - size of 1022976 bytes
                                                                                                                                                       ***** Algorithm changed to reno *****
                                                                                                                                                      upload file number 2 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
upload file number 4 - size of 1022976 bytes
upload file number 5 - size of 1022976 bytes
read file number 4 - size of 1022976 bytes
read file number 5 - size of 1022976 bytes
the avg for cubic Algorithm is: 0.438419 seconds
**** Algorithm changed to reno ****
                                                                                                                                                         files are successfuly sent in a reno algorithm
read file number 1 - size of 1022976 bytes
read file number 2 - size of 1022976 bytes
read file number 3 - size of 1022976 bytes
read file number 4 - size of 1022976 bytes
read file number 5 - size of 1022976 bytes
the avg for reno Algorithm is: 0.335935 seconds
server disconnected from client
```

15 % Losses

```
parak@barak:~/Desktop/Study/Communication & computer/Ex4$ sudo tc qdisc change d
                                                                                                                                                                   barak@barak:~/Desktop/Study/Communication & computer/Ex4$ ./sender
successfully created socket
 ev lo root netem loss 15%
                                                  dy/Communication & computer/Ex4S ./measure
                                                                                                                                                                     successfuly connected to server
successfuly created socket successfuly made bind
                                                                                                                                                                   upload file number 1 - size of 1022976 bytes
                                                                                                                                                                upload file number 1 - stze of 1022976 bytes
upload file number 2 - stze of 1022976 bytes
upload file number 3 - stze of 1022976 bytes
upload file number 4 - stze of 1022976 bytes
upload file number 5 - stze of 1022976 bytes
read file number 1 - size of 1022976 bytes
read file number 2 - size of 1022976 bytes
read file number 3 - size of 1022976 bytes
                                                                                                                                                                   5 files are successfully sent in a cubic algorithm
read file number 4 - size of 1022976 bytes
read file number 5 - size of 1022976 bytes
the avg for cubic Algorithm is: 1.225918 seconds
                                                                                                                                                                    ***** Algorithm changed to reno *****
                                                                                                                                                                   upload file number 1 - size of 1022976 bytes
upload file number 2 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
***** Algorithm changed to reno *****
                                                                                                                                                                   upload file number 4 - size of 1022976 bytes
upload file number 5 - size of 1022976 bytes
5 files are successfuly sent in a reno algorithm
read file number 1 - size of 1022976 bytes
read file number 2 - size of 1022976 bytes
read file number 3 - size of 1022976 bytes
                                                                                                                                                                    client disconnected from server
read file number 4 - size of 1022976 bytes
read file number 5 - size of 1022976 bytes
the avg for reno Algorithm is: 0.465378 seconds
server disconnected from client
barak@barak:~/Desktop/Study/Comm
```

"cubic" envision all rul teno" envisor (15%) ples at

20 % hoses

```
parak@barak:~/Desktop/Study/Communication & computer/Ex4$ sudo tc qdisc change d
                                                                                                                                                    barak@barak:~/Desktop/Study/Communication & computer/Ex4$ ./sender
                                                                                                                                                   successfully created socket
successfuly connected to server
ev lo root netem loss 20%
successfuly created socket successfuly made bind
                                                                                                                                                   upload file number 1 - size of 1022976 bytes
listening...
connected to client
                                                                                                                                                   upload file number 2 - size of 1022976 bytes
                                                                                                                                                upload file number 4 - size of 1022976 bytes
upload file number 5 - size of 1022976 bytes
read file number 1 - size of 1022976 bytes
read file number 2 - size of 1022976 bytes
read file number 3 - size of 1022976 bytes
read file number 4 - size of 1022976 bytes
read file number 5 - size of 1022976 bytes
                                                                                                                                                    5 files are successfully sent in a cubic algorithm
                                                                                                                                                    **** Algorithm changed to reno ****
                                                                                                                                                   upload file number 1 - size of 1022976 bytes
upload file number 2 - size of 1022976 bytes
upload file number 3 - size of 1022976 bytes
the avg for cubic Algorithm is: 2.792240 seconds
**** Algorithm changed to reno ****
                                                                                                                                                   upload file number 4 - size of 1022976 bytes
                                                                                                                                                    upload file number 5 - size of 1022976 bytes
read file number 1 - size of 1022976 bytes read file number 2 - size of 1022976 bytes read file number 3 - size of 1022976 bytes read file number 4 - size of 1022976 bytes read file number 5 - size of 1022976 bytes the avg for reno Algorithm is: 10.829962 seconds server disconnected from client barak@barak:-/Desktop/Study/Communication & comp
                                                                                                                                                   5 files are successfuly sent in a reno algorithm client disconnected from server
```

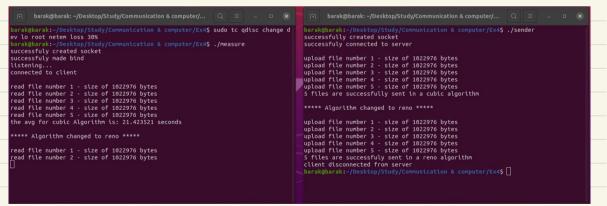
"reno" prince to the "cubic" prince (20%) of KI HEDN

25 % hossos

```
barak@barak:-/Desktop/Study/Communication & computer/... Q = - □ ×

barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the nether loss 25% barak@barak:-/Desktop/Study/Communication & computer/Ex4$ sudo to qdisc change devort on the number 1 size of 1022976 bytes upload file number 1 size of 1022976 bytes upload file number 2 size of 1022976 bytes upload file number 2 size of 1022976 bytes upload file number 2 size of 1022976 bytes upload file number 3 size of 1022976 bytes uplo
```

36% 105505



מיכינו ליישלף מי סמ בקות, ניתן לראת בקובל קבסם. 200 005 כי לאחר פצל שנות לא נשלח יותר פקולת מסון קטד