Lab 6

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Problem 1.
The result is similar to the result of lab4:

- For `myping.c`: since it takes longer for udp packets to travel between overlay nodes, the ping result increases as I increase the number of overlay nodes. I used 3 overlay routers which are `sslab02, sstlab04, sslab06`, and I run `mypingd.c` at `sslab01` and `myping.c` at `sslab08`. The ping results are:

```
1.997 ms
2.225 ms
1.792 ms
2.132 ms
2.023 ms
1.989 ms
```

  Ping result without using overlay router is: `0.447 ms` on average.

- For `traffic_send.c`: Since we test the app on multiple sslabs with pretty much bandwidth, there is no significant differences when using overlay routers. However, if there is a bottle neck node in one of the overlay node, I would expect the bandwidth to be decrease. Below is result using same overlay nodes (i.e `sslab02, sslab04, sslab06`) `traffic_snd` :

```
Portnumber: 21806
payloadSize: 1000
Package Count: 1000
Package Spacing: 1000
Completion Time: 1.132008 s
Package Per Second (PPS): 883.386047 packages/s
Bit sent: 8440000
Bits Per Second (BPS): 7455778.000000 bps
```

```
traffic_rcv

        Port Number: 30000
        payloadSize: 1000
        Start listening ...
        First Package arrived.
        End of transmission
        Package Count: 1000
        Completion Time: 1.133577 s
        Bits received: 8440000
        Package Per Second (PPS): 883.722412 packages/s
```

- For testing multiple clients, I do not see any significant changes.

Problem 2.