

# CompNet Lab2

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## Build

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Build Libraries:

```
1 $ cd src
2 $ make clean
3 $ make
```

Build Libraries for debug:

```
1 $ cd src
2 $ make clean
3 $ make debug
```

Build testfiles(after build libraries):

```
1 $ cd src/test
2 $ make clean
3 $ make
```

## 3.2 Link-layer: Packet I/O on Ethernet

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### Programming Task 1 (PT1).

Finished.

### Programming Task 2 (PT2).

Finished.

### Checkpoint 1 (CP1).

I used `examples/example.txt` to build the vNet. I ran `./eth_reciever` on `ns2` and ran `./eth_sender` on `ns1`.

Here is the screenshots. They show that my implementation can detect network interfaces on the host.

You should use command `make debug` to build the libraries to show the device name in `initDevice()`.

```
root@ubuntu:/home/java/Lab2/src/test
Data:
Avava AvA!
^C
root@ubuntu:/home/java/Lab2/src/test# ./eth_sender
Device name: veth1-2
Device name: any
Device name: bluetooth-monitor
Device name: nflog
Device name: nfiqueue
Device name: lo
Receive from device id 0, length 28
Source address: 4a:11:3e:c7:40:3f
Data:
Avava AvA!
Receive from device id 0, length 28
Source address: 4a:11:3e:c7:40:3f
Data:
Avava AvA!
Receive from device id 0, length 28
Source address: 4a:11:3e:c7:40:3f
Data:
Avava AvA!
^C
root@ubuntu:/home/java/Lab2/src/test#

root@ubuntu:/home/ava/Lab2/src/test
Hello, I'm Diana!
^C
root@ubuntu:/home/ava/Lab2/src/test# ./eth_receiver
Device name: veth2-1
Device name: veth2-3
Device name: any
Device name: bluetooth-monitor
Device name: nflog
Device name: nfiqueue
Device name: lo
Receive from device id 0, length 35
Source address: fe:37:98:dc:83:ef
Data:
Hello, I'm Diana!
Receive from device id 0, length 35
Source address: fe:37:98:dc:83:ef
Data:
Hello, I'm Diana!
Receive from device id 0, length 35
Source address: fe:37:98:dc:83:ef
Data:
Hello, I'm Diana!
^C
root@ubuntu:/home/ava/Lab2/src/test#
```

## Checkpoint 2 (CP2).

I used `examples/example.txt` to build the vNet. I ran `./eth_reciever` on `ns2` and ran `./eth_sender` on `ns1`.

Here is the screenshots.

