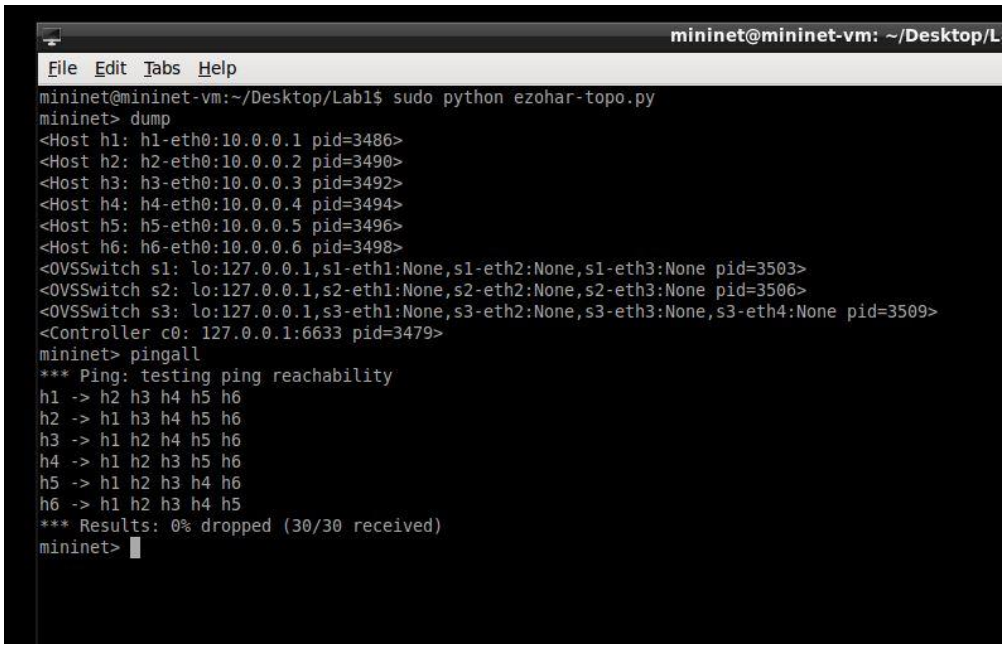
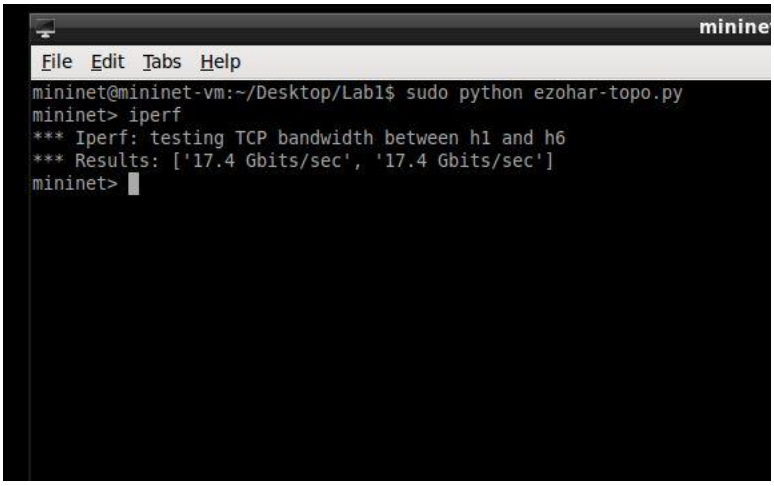
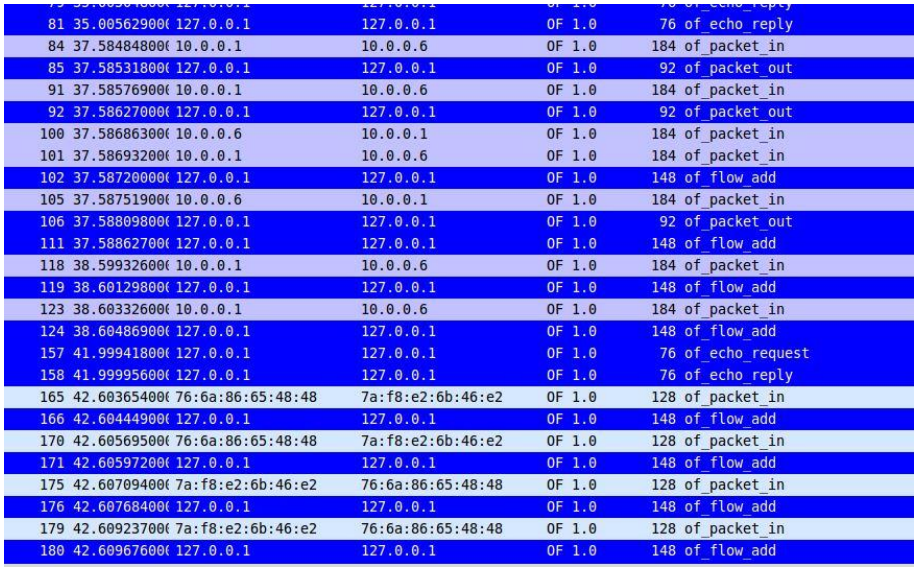
2. In the screenshot the *dump* command is called and so all info related to the custom mininet is "dumped." Also *pingall* is called which pings all hosts and shows they are reachable from all other hosts.



3. The connects speed is 17.4 Gbits/sec



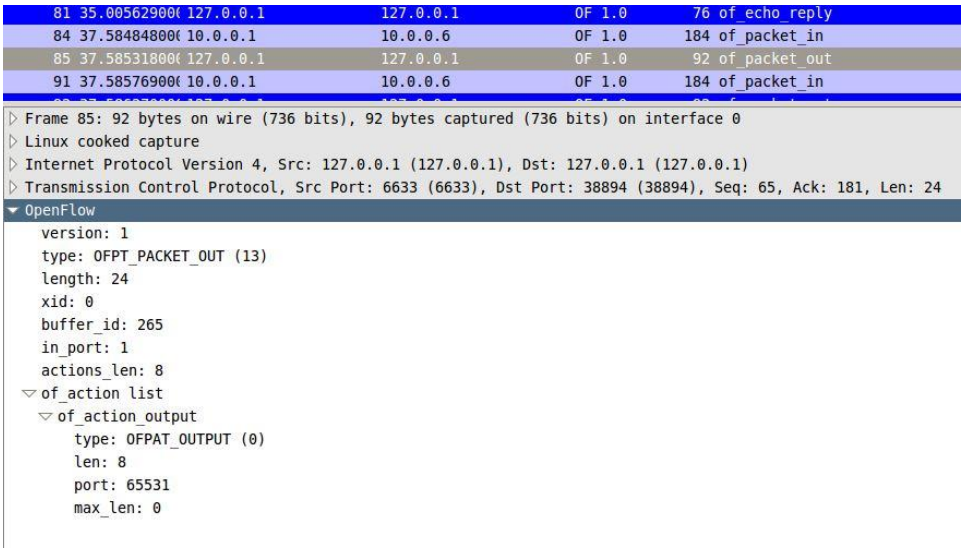
4. a. For the command *h1 ping -c 5 h6* there are a total of **11** “of_packet_in” message.



81	35.00562900(	127.0.0.1	127.0.0.1	OF 1.0	76 of_echo_reply
84	37.58484800(	10.0.0.1	10.0.0.6	OF 1.0	184 of_packet_in
85	37.58531800(	127.0.0.1	127.0.0.1	OF 1.0	92 of_packet_out
91	37.58576900(	10.0.0.1	10.0.0.6	OF 1.0	184 of_packet_in
92	37.58627000(	127.0.0.1	127.0.0.1	OF 1.0	92 of_packet_out
100	37.58686300(	10.0.0.6	10.0.0.1	OF 1.0	184 of_packet_in
101	37.58693200(	10.0.0.1	10.0.0.6	OF 1.0	184 of_packet_in
102	37.58720000(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add
105	37.58751900(	10.0.0.6	10.0.0.1	OF 1.0	184 of_packet_in
106	37.58809800(	127.0.0.1	127.0.0.1	OF 1.0	92 of_packet_out
111	37.58862700(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add
118	38.59932600(	10.0.0.1	10.0.0.6	OF 1.0	184 of_packet_in
119	38.60129800(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add
123	38.60332600(	10.0.0.1	10.0.0.6	OF 1.0	184 of_packet_in
124	38.60486900(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add
157	41.99941800(	127.0.0.1	127.0.0.1	OF 1.0	76 of_echo_request
158	41.99995600(	127.0.0.1	127.0.0.1	OF 1.0	76 of_echo_reply
165	42.60365400(	76:6a:86:65:48:48	7a:f8:e2:6b:46:e2	OF 1.0	128 of_packet_in
166	42.60444900(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add
170	42.60569500(	76:6a:86:65:48:48	7a:f8:e2:6b:46:e2	OF 1.0	128 of_packet_in
171	42.60597200(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add
175	42.60709400(	7a:f8:e2:6b:46:e2	76:6a:86:65:48:48	OF 1.0	128 of_packet_in
176	42.60768400(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add
179	42.60923700(	7a:f8:e2:6b:46:e2	76:6a:86:65:48:48	OF 1.0	128 of_packet_in
180	42.60967600(	127.0.0.1	127.0.0.1	OF 1.0	148 of_flow_add

b. For of_packet_in the source and destination switch between 10.0.0.1 and 10.0.0.6.

For of_packet_out the source and destination is 127.0.0.1



81	35.00562900(	127.0.0.1	127.0.0.1	OF 1.0	76 of_echo_reply
84	37.58484800(	10.0.0.1	10.0.0.6	OF 1.0	184 of_packet_in
85	37.58531800(	127.0.0.1	127.0.0.1	OF 1.0	92 of_packet_out
91	37.58576900(	10.0.0.1	10.0.0.6	OF 1.0	184 of_packet_in

```
▷ Frame 85: 92 bytes on wire (736 bits), 92 bytes captured (736 bits) on interface 0
▷ Linux cooked capture
▷ Internet Protocol Version 4, Src: 127.0.0.1 (127.0.0.1), Dst: 127.0.0.1 (127.0.0.1)
▷ Transmission Control Protocol, Src Port: 6633 (6633), Dst Port: 38894 (38894), Seq: 65, Ack: 181, Len: 24
▽ OpenFlow
    version: 1
    type: OFPT_PACKET_OUT (13)
    length: 24
    xid: 0
    buffer_id: 265
    in_port: 1
    actions_len: 8
  ▽ of_action list
    ▽ of_action_output
        type: OFPAT_OUTPUT (0)
        len: 8
        port: 65531
        max_len: 0
```

c. There are 257 entries. The ICMP file types are “Echo (ping) reply” and “Echo (ping) request.”