EP-Lab04-2021

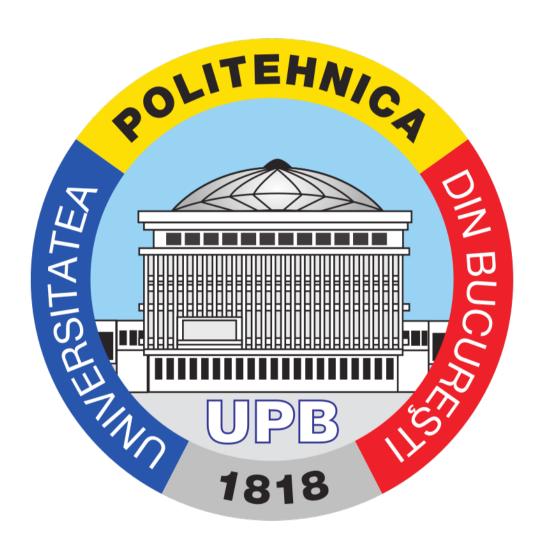Olaru Gabriel Iulian, 342C2

EX1:
TaskA:

sudo tcpdump -ni any port 80 -v -s0 -X --time-stamp-precision=nano – number

curl ocw.cs.pub.ro

```
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">
<html><head>
<title>301 Moved Permanently</title>
</head><body>
<h1>Moved Permanently</h1>
<p>The document has moved <a href="https://ocw.cs.pub.ro/">here</a>.</p>
<hr>
<address>Apache/2.4.10 (Debian) Server at ocw.cs.pub.ro Port 80</address>
</body></html>
0x0000:  4500 0234 62ce 4000 3506 4bb2 8d55 e341   E..4b.@.5.K..U.A
0x0010:  c0a8 6404 0050 a1b2 5188 0009 8c8e dd86   ..d..P..Q.......
0x0020:  8018 00e3 f1e9 0000 0101 080a 1ca3 62c4   ..............b.
0x0030:  f2bf 1397 4854 5450 2f31 2e31 2033 3031   ....HTTP/1.1.301
0x0040:  204d 6f76 6564 2050 6572 6d61 6e65 6e74   .Moved.Permanent
0x0050:  6c79 0d0a 4461 7465 3a20 5475 652c 2030   ly..Date:.Tue,.0
0x0060:  3220 4e6f 7620 3230 3231 2030 383a 3135   2.Nov.2021.08:15
0x0070:  3a32 3220 474d 540d 0a53 6572 7665 723a   :22.GMT..Server:
0x0080:  2041 7061 6368 652f 322e 342e 3130 2028   .Apache/2.4.10.(
0x0090:  4465 6269 616e 290d 0a4c 6f63 6174 696f   Debian)..Locatio
0x00a0:  6e3a 2068 7474 7073 3a2f 2f6f 6377 2e63   n:.https://ocw.c
0x00b0:  732e 7075 622e 726f 2f0d 0a43 6f6e 7465   s.pub.ro/..Conte
0x00c0:  6e74 2d4c 656e 6774 683a 2033 3039 0d0a   nt-Length:.309..
0x00d0:  436f 6e74 656e 742d 5479 7065 3a20 7465   Content-Type:.te
0x00e0:  7874 2f68 746d 6c3b 2063 6861 7273 6574   xt/html;.charset
0x0200:  7220 6174 206f 6377 2e63 732e 7075 622e   r.at.ocw.cs.pub.
0x0210:  726f 2050 6f72 7420 3830 3c2f 6164 6472   ro.Port.80</addr
0x0220:  6573 733e 0a3c 2f62 6f64 793e 3c2f 6874   ess>.</body></ht
0x0230:  6d6c 3e0a                                  ml>.
 7  10:15:22.816055327 IP (tos 0x0, ttl 64, id 49795, offset 0, flags [DF], proto TCP (6), length 52)
   192.168.100.4.41394 > 141.85.227.65.80: Flags [.], cksum 0x956a (incorrect -> 0xfa1b), ack 513, win 498, options [nop,nop,TS val 407
2608667 ecr 480469700], length 0
0x0000:  4500 0034 c283 4000 4006 e2fc c0a8 6404   E..4..@.@.....d.
0x0010:  8d55 e341 a1b2 0050 8c8e dd86 5188 0209   .U.A...P....Q...
0x0020:  8010 01f2 956a 0000 0101 080a f2bf 139b   .....j.........
0x0030:  1ca3 62c4                                  ..b.
```

ntpdate -q ro.pool.ntp.org

```
 3  10:16:36.453088539 IP6 (flowlabel 0x9e167, hlim 60, next-header TCP (6) payload length: 20) 2600:1900:4110:86f::.80 > 2a02:2f00:1
01:a500:2011:9259:f9:2c89.38336: Flags [R], cksum 0x400e (correct), seq 1217079751, win 0, length 0
0x0000:  6009 e167 0014 063c 2600 1900 4110 086f   `..g..<&...A..o
0x0010:  0000 0000 0000 0000 2a02 2f00 0101 a500   ........*./.....
0x0020:  2011 9259 00f9 2c89 0050 95c0 488b 29c7   ...Y..,..P..H.).
0x0030:  0000 0000 5004 0000 400e 0000            ....P...@...
 4  10:16:36.475984818 IP (tos 0x0, ttl 57, id 0, offset 0, flags [DF], proto TCP (6), length 40)
   93.184.220.29.80 > 192.168.100.4.42986: Flags [R], cksum 0x1de3 (correct), seq 1171408238, win 0, length 0
0x0000:  4500 0028 0000 4000 3906 e34d 5db8 dc1d   E..(..@.9..M]...
0x0010:  c0a8 6404 0050 a7ea 45d2 456e 0000 0000   ..d..P..E.En....
0x0020:  5004 0000 1de3 0000                       P.......
 5  10:16:58.960722907 IP6 (flowlabel 0x6c24d, hlim 64, next-header TCP (6) payload length: 20) 2a02:2f00:101:a500:2011:9259:f9:2c89.
41502 > 2606:4700::6812:1eb6.80: Flags [.], cksum 0xd2d9 (incorrect -> 0xde53), ack 1443420374, win 501, length 0
0x0000:  6006 c24d 0014 0640 2a02 2f00 0101 a500   `..M...@*./.....
0x0010:  2011 9259 00f9 2c89 2606 4700 0000 0000   ...Y..,.&.G.....
0x0020:  0000 0000 6812 1eb6 a21e 0050 811f aa5f   ....h......P..._
0x0030:  5608 d8d6 5010 01f5 d2d9 0000            V...P.......
 6  10:16:58.965009726 IP6 (flowlabel 0x3afd0, hlim 58, next-header TCP (6) payload length: 20) 2606:4700::6812:1eb6.80 > 2a02:2f00:1
01:a500:2011:9259:f9:2c89.41502: Flags [.], cksum 0xe005 (correct), ack 1, win 66, length 0
0x0000:  6003 afd0 0014 063a 2606 4700 0000 0000   `......:&.G.....
0x0010:  0000 0000 6812 1eb6 2a02 2f00 0101 a500   ....h...*./.....
0x0020:  2011 9259 00f9 2c89 0050 a21e 5608 d8d6   ...Y..,..P..V...
0x0030:  811f aa60 5010 0042 e005 0000            ...`P..B....
^C
```

TaskB:

Task1:
sudo iptables -t filter -I OUTPUT -p tcp -j LOG --log-prefix "EP: "

```
[  901.899770] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=54.192.235.71 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=16465 DF PROTO=TCP SPT=54954 D
=443 WINDOW=501 RES=0x00 ACK URGP=0
[  902.215775] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=185.184.8.65 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=44360 DF PROTO=TCP SPT=39562 DP
443 WINDOW=502 RES=0x00 ACK URGP=0
[  903.293880] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=52.114.104.44 LEN=222 TOS=0x00 PREC=0x00 TTL=64 ID=12180 DF PROTO=TCP SPT=35576
T=443 WINDOW=501 RES=0x00 ACK PSH URGP=0
[  904.844519] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=52.114.104.13 LEN=750 TOS=0x00 PREC=0x00 TTL=64 ID=5913 DF PROTO=TCP SPT=60365 D
=443 WINDOW=501 RES=0x00 ACK PSH URGP=0
[  906.009309] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=35.224.170.84 LEN=60 TOS=0x00 PREC=0x00 TTL=64 ID=8701 DF PROTO=TCP SPT=51514 DP
80 WINDOW=64240 RES=0x00 SYN URGP=0
[  906.145823] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=35.224.170.84 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=8702 DF PROTO=TCP SPT=51514 DP
80 WINDOW=502 RES=0x00 ACK URGP=0
[  906.146004] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=35.224.170.84 LEN=139 TOS=0x00 PREC=0x00 TTL=64 ID=8703 DF PROTO=TCP SPT=51514 D
=80 WINDOW=502 RES=0x00 ACK PSH URGP=0
[  906.284361] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=35.224.170.84 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=8704 DF PROTO=TCP SPT=51514 DP
80 WINDOW=501 RES=0x00 ACK URGP=0
[  906.284595] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=35.224.170.84 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=8705 DF PROTO=TCP SPT=51514 DP
80 WINDOW=501 RES=0x00 ACK FIN URGP=0
[  906.447781] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=54.68.215.86 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=1582 DF PROTO=TCP SPT=42956 DPT
43 WINDOW=501 RES=0x00 ACK URGP=0
[  918.595820] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=52.111.255.0 LEN=40 TOS=0x00 PREC=0x00 TTL=64 ID=60264 DF PROTO=TCP SPT=54656 DP
443 WINDOW=501 RES=0x00 ACK URGP=0
[  923.011839] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=20.42.65.85 LEN=40 TOS=0x00 PREC=0x00 TTL=64 ID=10638 DF PROTO=TCP SPT=45180 DPT
43 WINDOW=501 RES=0x00 ACK URGP=0
[  924.743837] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=50.112.134.240 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=43032 DF PROTO=TCP SPT=39822
T=443 WINDOW=501 RES=0x00 ACK URGP=0
[  925.100476] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=52.114.104.13 LEN=750 TOS=0x00 PREC=0x00 TTL=64 ID=5914 DF PROTO=TCP SPT=60365 D
=443 WINDOW=501 RES=0x00 ACK PSH URGP=0
[  926.787841] EP: IN= OUT=wlo1 SRC=192.168.100.4 DST=199.232.138.167 LEN=52 TOS=0x00 PREC=0x00 TTL=64 ID=54971 DF PROTO=TCP SPT=47634
PT=443 WINDOW=501 RES=0x00 ACK URGP=0
```

Task2:

```
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 1
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 2
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 3
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 4
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 5
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 6
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 7
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 8
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 9
ghostpants@ghostmachine in ~/Documents/UPB_IV_C2_2020-2021/EP/lab04 on EP-2021 ✗ (origin/EP-2021)
$ sudo iptables -t mangle -A OUTPUT -p udp --dport 53 -j TTL --ttl-set 10
```

```
$ dig +short fep.grid.pub.ro @8.8.8.8
141.85.241.99
```

Task3:
Cand pachetele sunt blocate de firewall.

EX2:
TaskA:

```
$ ip -c neigh show
192.168.100.1 dev wlo1 lladdr 94:00:b0:5d:af:cc REACHABLE
fe80::9600:b0ff:fe5d:afcc dev wlo1 lladdr 94:00:b0:5d:af:cc router DELAY
fe80::1 dev wlo1 lladdr 94:00:b0:5d:af:cc router REACHABLE
```

```
$ sudo arp-scan --localnet
Interface: wlo1, datalink type: EN10MB (Ethernet)
Starting arp-scan 1.9 with 256 hosts (http://www.nta-monitor.com/tools/arp-scan/)
192.168.100.1    94:00:b0:5d:af:cc       (Unknown)
192.168.100.3    88:66:5a:1c:11:fa       (Unknown)
192.168.100.5    e8:d8:19:8e:55:05       (Unknown)

4 packets received by filter, 0 packets dropped by kernel
Ending arp-scan 1.9: 256 hosts scanned in 4.602 seconds (55.63 hosts/sec). 3 responded
```

```
$ ./arp.sh wlo1
 192.168.100.1        (Unknown)
 192.168.100.3        (Unknown)
 192.168.100.5        (Unknown)
```

Task1:
sudo iptables -t filter -I OUTPUT -   ==> ok
                                          ==> fail
                                          ==> ok

TaskB:

```
$ sudo nmap
    -sn     `# disable port scan`        \
    -Pn     `# disable host discovery`   \
    -tr     `# perform traceroute`       \
    8.8.8.8

Starting Nmap 7.60 ( https://nmap.org ) at 2021-
Nmap scan report for dns.google (8.8.8.8)
Host is up (0.022s latency).

TRACEROUTE (using proto 1/icmp)
HOP RTT       ADDRESS
1   3.16 ms   _gateway (192.168.100.1)
2   4.44 ms   StamAcasa.rdsnet.ro (10.0.0.1)
3   6.24 ms   10.28.24.65
4   12.94 ms  10.220.158.66
5   20.85 ms  10.220.155.52
6   24.03 ms  209.85.168.182
7   20.86 ms  74.125.242.241
8   20.87 ms  142.251.65.227
9   22.35 ms  dns.google (8.8.8.8)

Nmap done: 1 IP address (1 host up) scanned in 0.22 seconds
```

```
555 23.608947392  192.168.100.4   52.112.18.248   UDP    150 50029 → 3480 Len=108
556 23.609018977  192.168.100.4   52.112.18.248   UDP    150 50054 → 3481 Len=108
557 23.629804020  192.168.100.4   52.112.18.248   UDP    141 50029 → 3480 Len=99
558 23.659309049  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50029
559 23.670402755  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50054
560 23.709262905  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50009
561 23.712073178  192.168.100.4   52.112.18.248   UDP    150 50047 → 3481 Len=108
562 23.809696125  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50047
563 24.346265670  2a02:2f00:101:a500:.. 2a00:1450:4016:809:.. UDP   95 35665 → 443 Len=33
564 24.357991968  192.168.100.4   52.112.18.248   UDP    93 50047 → 3481 Len=51
565 24.358058431  192.168.100.4   52.112.18.248   UDP    1269 50047 → 3481 Len=1227
566 24.358082160  192.168.100.4   52.112.18.248   UDP    1269 50047 → 3481 Len=1227
567 24.358103409  192.168.100.4   52.112.18.248   UDP    1269 50047 → 3481 Len=1227
568 24.358124123  192.168.100.4   52.112.18.248   UDP    1269 50047 → 3481 Len=1227
569 24.393528476  2a00:1450:4016:809:.. 2a02:2f00:101:a500:.. UDP   88 443 → 35665 Len=26
570 24.685776426  192.168.100.4   52.112.18.248   UDP    150 50029 → 3480 Len=108
571 24.736958703  192.168.100.4   52.112.18.248   UDP    150 50009 → 3479 Len=108
572 24.737021693  192.168.100.4   52.112.18.248   UDP    150 50054 → 3481 Len=108
573 24.769882457  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50029
574 24.815311513  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50009
575 24.829727471  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50054
576 24.839784964  192.168.100.4   52.112.18.248   UDP    150 50047 → 3481 Len=108
577 24.920444968  52.112.18.248   192.168.100.4   STUN   114 Binding Success Response XOR-MAPPED-ADDRESS: 188.25.212.145:50047
578 25.122883092  52.112.18.248   192.168.100.4   UDP    81 3479 → 50009 Len=39
579 25.122883537  52.112.18.248   192.168.100.4   UDP    1257 3479 → 50009 Len=1215
580 25.122883634  52.112.18.248   192.168.100.4   UDP    1257 3479 → 50009 Len=1215
```

```
$ traceroute 8.8.8.8
traceroute to 8.8.8.8 (8.8.8.8), 30 hops max, 60 byte packets
1  _gateway (192.168.100.1)  1.665 ms  1.539 ms  1.486 ms
2  StamAcasa.rdsnet.ro (10.0.0.1)  5.561 ms  5.513 ms  5.467 ms
3  10.28.24.65 (10.28.24.65)  5.894 ms  5.837 ms  5.790 ms
4  10.220.148.206 (10.220.148.206)  16.404 ms 10.220.165.134 (10.220.165.134)  6.179 ms static-10-220-142-54.rdsnet.ro (10.220.142.
6.101 ms
5  10.220.178.110 (10.220.178.110)  22.783 ms 10.220.177.106 (10.220.177.106)  21.803 ms 10.220.155.46 (10.220.155.46)  21.755 ms
6  72.14.216.212 (72.14.216.212)  22.645 ms 209.85.168.182 (209.85.168.182)  21.792 ms  22.007 ms
7  * * *
8  142.251.65.221 (142.251.65.221)  23.129 ms 142.251.65.223 (142.251.65.223)  22.278 ms 142.251.65.221 (142.251.65.221)  20.510 ms
9  dns.google (8.8.8.8)  20.069 ms  19.981 ms  21.379 ms
```

EX3:

TaskA:

```
$ make -j $(nproc)
gcc -c -I include  -o obj/str_proto.o src/str_proto.c
g++  -o bin/ops-inject obj/decoders.o obj/cli_args.o obj/reassemblers.o obj/main.o obj/str_proto.o obj/ops_udp.o obj/csum.o obj/ops_tcp.
o obj/ops_ip.o -lnetfilter_queue -lnfnetlink
```

```
[*] src/main.cpp:159 Parsed cli arguments
[*] src/main.cpp:164 Opened nfq handle
[*] src/main.cpp:170 Bound nfq handle to queue
[*] src/main.cpp:175 Set copy packet mode
[*] src/main.cpp:189 Starting main loop
```

```
$ ping -c 3 $(dig +short digitalocean.com | head -n 1)
PING 104.16.181.15 (104.16.181.15) 56(84) bytes of data.
64 bytes from 104.16.181.15: icmp_seq=1 ttl=57 time=143 ms
RR:     188.25.212.145
        172.19.212.210
        10.220.16.74
        10.220.189.20
        86.120.70.184
        162.158.16.1
        104.16.181.15
        104.16.181.15
        162.158.16.1

64 bytes from 104.16.181.15: icmp_seq=2 ttl=57 time=19.0 ms       (same route)
64 bytes from 104.16.181.15: icmp_seq=3 ttl=57 time=9.46 ms       (same route)

--- 104.16.181.15 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2000ms
rtt min/avg/max/mdev = 9.462/57.453/143.893/61.246 ms
```

```
[*] src/main.cpp:159 Parsed cli arguments
[*] src/main.cpp:164 Opened nfq handle
[*] src/main.cpp:170 Bound nfq handle to queue
[*] src/main.cpp:175 Set copy packet mode
[*] src/main.cpp:189 Starting main loop
[-] src/main.cpp:101 Received new packet   src=192.168.100.4 dst=104.16.181.15 proto="Internet Control Message Protocol"
[-] src/main.cpp:101 Received new packet   src=192.168.100.4 dst=104.16.181.15 proto="Internet Control Message Protocol"
[-] src/main.cpp:101 Received new packet   src=192.168.100.4 dst=104.16.181.15 proto="Internet Control Message Protocol"
```

TaskB:

sudo tcpdump -U -i any -v -s0 -X >> log

```
$ cat log | grep ICMP
11:04:26.921458 IP (tos 0x0, ttl 64, id 56936, offset 0, flags [DF], proto ICMP (1), length 84)
    ghostmachine > 104.16.182.15: ICMP echo request, id 20588, seq 1, length 64
11:04:26.925170 IP (tos 0x0, ttl 58, id 10123, offset 0, flags [none], proto ICMP (1), length 84)
    104.16.182.15 > ghostmachine: ICMP echo reply, id 20588, seq 1, length 64
11:04:27.923305 IP (tos 0x0, ttl 64, id 57061, offset 0, flags [DF], proto ICMP (1), length 84)
    ghostmachine > 104.16.182.15: ICMP echo request, id 20588, seq 2, length 64
11:04:27.926731 IP (tos 0x0, ttl 58, id 10208, offset 0, flags [none], proto ICMP (1), length 84)
    104.16.182.15 > ghostmachine: ICMP echo reply, id 20588, seq 2, length 64
11:04:28.924605 IP (tos 0x0, ttl 64, id 57239, offset 0, flags [DF], proto ICMP (1), length 84)
    ghostmachine > 104.16.182.15: ICMP echo request, id 20588, seq 3, length 64
11:04:28.928244 IP (tos 0x0, ttl 58, id 20787, offset 0, flags [none], proto ICMP (1), length 84)
    104.16.182.15 > ghostmachine: ICMP echo reply, id 20588, seq 3, length 64
11:04:31.491183 IP6 (hlim 255, next-header ICMPv6 (58) payload length: 16) fe80::9600:b0ff:fe5d:afd8 > ip6-allrouters: [icmp6 sum ok] IC
MP6, router solicitation, length 16
```

TaskC:

sudo tcpdump -U -i any -v -s0 -X -w logs.pcap
sudo tshark -r logs.pcap

```
$ sudo tshark -r logs.pcap | grep ICMP
Running as user "root" and group "root". This could be dangerous.
 2226  29.360958 fe80::9600:b0ff:fe5d:afd8 → ff02::2          ICMPv6 72 Router Solicitation from 94:00:b0:5d:af:d8
 2243  30.005007 fe80::9600:b0ff:fe5d:afcc → 2a02:2f00:101:a500:2011:9259:f9:2c89 ICMPv6 88 Neighbor Solicitation for 2a02:2f00:101:a500
:2011:9259:f9:2c89 from 94:00:b0:5d:af:cc
 2244  30.005067 2a02:2f00:101:a500:2011:9259:f9:2c89 → fe80::9600:b0ff:fe5d:afcc ICMPv6 80 Neighbor Advertisement 2a02:2f00:101:a500:20
11:9259:f9:2c89 (sol)
 2340  35.172296 fe80::4ed5:5057:9b51:d0f6 → fe80::9600:b0ff:fe5d:afcc ICMPv6 88 Neighbor Solicitation for fe80::9600:b0ff:fe5d:afcc fro
m 24:ee:9a:e8:7e:b1
 2341  35.174141 fe80::9600:b0ff:fe5d:afcc → fe80::4ed5:5057:9b51:d0f6 ICMPv6 80 Neighbor Advertisement fe80::9600:b0ff:fe5d:afcc (rtr,
sol)
 2423  40.172110 fe80::9600:b0ff:fe5d:afcc → fe80::4ed5:5057:9b51:d0f6 ICMPv6 88 Neighbor Solicitation for fe80::4ed5:5057:9b51:d0f6 fro
m 94:00:b0:5d:af:cc
 2424  40.172169 fe80::4ed5:5057:9b51:d0f6 → fe80::9600:b0ff:fe5d:afcc ICMPv6 80 Neighbor Advertisement fe80::4ed5:5057:9b51:d0f6 (sol)
```

TaskD-E:

Atata s-a putut.

EX4:

Feedback Performance Evaluation

Your response has been recorded.

Submit another response