

Ping.c – used by commands:

```
5/final$ gcc Ping.c -lpcap -o "ping.out"
5/final$ sudo ./ping.out
```

The output is like:

```
Ping IP: 151.101.2.216, the total Data is: 27 bytes.
It's took 0.015625 milliseconds to ping
```

On Wireshark it is looks like:

192.168.68.115	151.101.2.216	ICMP	61 Echo (ping) request id=0x1200, seq=0/0, ttl=128 (reply in 275)
157.240.196.60	192.168.68.115	ICMP	56 443 → 55993 [ACK] Seq=1 Ack=76 Win=1173 Len=0
151.101.2.216	192.168.68.115	ICMP	61 Echo (ping) reply id=0x1200, seq=0/0, ttl=54 (request in 273)

It also seems that the checksum is correct:

```
> Frame 275: 61 bytes on wire (488 bits), 61 bytes captured
> Ethernet II, Src: Tp-LinkT_c8:d8:ac (d8:07:b6:c8:d8:ac), I
> Internet Protocol Version 4, Src: 151.101.2.216, Dst: 192.
▼ Internet Control Message Protocol
    Type: 0 (Echo (ping) reply)
    Code: 0
    Checksum: 0xb636 [correct]
    [Checksum Status: Good]
    Identifier (BE): 4608 (0x1200)
    Identifier (LE): 18 (0x0012)
    Sequence Number (BE): 0 (0x0000)
    Sequence Number (LE): 0 (0x0000)
    [Request frame: 273]
    [Response time: 52.786 ms]
```

Sniffing.c used by: [be aware to adjust the machine name]

```
5/final$ gcc Sniffing.c -lpcap -o "sniffing.out"
5/final$ sudo ./sniffing.out
```

And the output is:

```
From: 10.0.2.15
To: 142.250.200.228
Type: 8
Code: 0

From: 142.250.200.228
To: 10.0.2.15
Type: 0
Code: 0
```