

Lab 5

AbdelRahman Adel AbdelFattah - 17012296

1. The header only contains Source Port, Destination Port, Length, and Checksum.
2. UDP Header is 8 bytes, with 2 bytes for each field.
3. The length field specifies the total bytes in a UDP segment (header and data) for example a packet of length 49 then the payload size is 41 bytes.

```
Destination Address: 17.248.250.8
User Datagram Protocol, Src Port: 65429, Dst Port: 443
Source Port: 65429
Destination Port: 443
Length: 49
Checksum: 0x861c [unverified]
[Checksum Status: Unverified]
[Stream index: 2]
[Timestamps]
[Time since first frame: 0.000000000 seconds]
[Time since previous frame: 0.000000000 seconds]
UDP payload (41 bytes)
[Community ID: 1:c514MZ95DdcMAl2CJlr6FbOKyAE=]
```

4. Length has 2 bytes then 16 bits max length is $2^{16} - 1 = 65535$ bytes
Then Max payload = $65535 - 8 = 65527$ Bytes
5. Longest port number = $2^{16} - 1 = 65535$
6. Protocol: UDP (17) in decimal and 0x11 in hexadecimal
7. Source of request = destination of reply and source of reply = destination of request