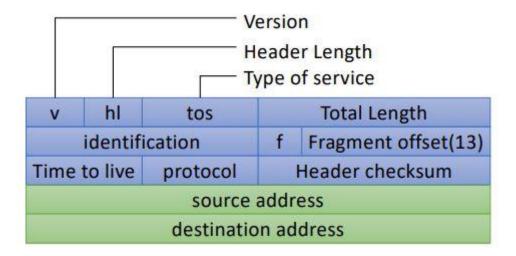
```
Internet Protocol Version 4, Src: 162.159.136.234, Dst: 192.168.178.20
  0100 .... = Version: 4
   .... 0101 = Header Length: 20 bytes (5)
  Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
     0000 00.. = Differentiated Services Codepoint: Default (0)
      .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
  Total Length: 78
  Identification: 0x6f9e (28574)
  010. .... = Flags: 0x2, Don't fragment
     0... .... = Reserved bit: Not set
     .1.. .... = Don't fragment: Set
      ..0. .... = More fragments: Not set
   ...0 0000 0000 0000 = Fragment Offset: 0
  Time to Live: 57
  Protocol: TCP (6)
  Header Checksum: 0x33c5 [validation disabled]
  [Header checksum status: Unverified]
  Source Address: 162.159.136.234
  Destination Address: 192.168.178.20
```

Https Verbindung.



```
Transmission Control Protocol, Src Port: 443, Dst Port: 51789, Seq: 1, Ack: 1, Len: 38
  Source Port: 443
  Destination Port: 51789
  [Stream index: 0]
  [Conversation completeness: Incomplete (12)]
  [TCP Segment Len: 38]
  Sequence Number: 1
                         (relative sequence number)
  Sequence Number (raw): 3871142788
  [Next Sequence Number: 39
                                (relative sequence number)]
  Acknowledgment Number: 1
                               (relative ack number)
  Acknowledgment number (raw): 1436442458
  0101 .... = Header Length: 20 bytes (5)
  Flags: 0x018 (PSH, ACK)
     000. .... = Reserved: Not set
...0 .... = Accurate ECN: Not set
     .... 0... = Congestion Window Reduced: Not set
     .... .0.. .... = ECN-Echo: Not set
     .... ..0. .... = Urgent: Not set
     .... ...1 .... = Acknowledgment: Set
     .... 1... = Push: Set
     .... .... .0.. = Reset: Not set
     .... .... ..0. = Syn: Not set
                                                             Source Port (16 Bit)
                                                                                               Destination Port (16 Bit)
      .... .... ...0 = Fin: Not set
     [TCP Flags: ·····AP···]
  Window: 8
                                                                            Sequence Number (32 Bit)
  [Calculated window size: 8]
  [Window size scaling factor: -1 (unknown)]
                                                                        Acknowledgement Number (32 Bit)
  Checksum: 0xa418 [unverified]
  [Checksum Status: Unverified]
                                                      Header
  Urgent Pointer: 0
                                                                                                Window Size (16 Bit)
                                                                               Flags
                                                      Length
  [Timestamps]
                                                            TCP Checksum (16 Bit)
                                                                                                Urgent Pointer (16 Bit)
  TCP payload (38 bytes)
                                                                            Optionen (falls vorhanden)
                                                                                              URG
                                                                                                                   SYN
                                                                                                    ACK
                                                                                                                        FIN
                                                                                                              RST
```

```
User Datagram Protocol, Src Port: 56923, Dst Port: 27018
Source Port: 56923
Destination Port: 27018
Length: 92
Checksum: 0x06d8 [unverified]
[Checksum Status: Unverified]
[Stream index: 0]
[Timestamps]
[Time since first frame: 0.000000000 seconds]
[Time since previous frame: 0.000000000 seconds]
UDP payload (84 bytes)
```

| Source port | Destination port |
|-------------|------------------|
| UDP length  | UDP checksum     |

## Aufgabe 2

103.161.122.83 ist eine IP-Adresse.

Bei /18 handelt es sich um eine CIDR-Notation, die die Subnetzmaske angibt.

/18 gibt uns an, dass die ersten 18 Bits der IP-Adresse für das Netzwerksignal verwendet werden und die restlichen 14 Bits für die Hostadresse.

Subnetzmaske: 255.255.192.0

Netzwerkadresse: 130.161.64.0

103.161.122.83 -> 01100111.10100001.01111010.01010011

255.255.192.0 -> 11111111111111111111111000000.00000000

130.161.64.0 <- 01100111.10100001.01000000.00000000

Broadcastadresse: 103.161.127.255

130.161.64.0 -> 01100111.10100001.01000000.00000000

14 Host-Bits -> 00000000.00000000.00111111.1111111

103.161.127.255 <- 01100111.10100001.011111111.1111111

103.161.193.83/18 prüfen:

103.161.193.83 -> 01100111.10100001.11000001.01010011

255.255.192.0 -> 11111111111111111111111000000.00000000

103.161.192.0 <- 01100111.10100001.11000000.00000000

Folglich liegen beide Adressen nicht im selben Netz.