Assignment 7 ICMP_2 wireshark

Q1. What is the IP address of your host? What is the IP address of the target destination host? Ans- Src. Host IP = 192.168.1.15, Dst. Host IP = 142.250.183.174

121 1.714254 192.168.1.15 142.259.183.174 ICMP 106 Echo (ping) request id=0x0001, seq=21/5376, ttl=1 (no response found!)

Q2. If ICMP sent UDP packets instead (as in Unix/Linux), would the IP protocol number still be 01 for the probe packets? If not, what would it be?

Ans- No, If ICMP sent UDP packets instead, then the IP protocol number would be 17 (UDP 17). In Windows:-

```
Internet Control Message Protocol
   Type: 11 (Time-to-live exceeded)
   Code: 0 (Time to live exceeded in transit)
   Checksum: 0xf4ff [correct]
   [Checksum Status: Good]
   Unused: 00000000
  Internet Protocol Version 4, Src: 192.168.1.15, Dst: 142.250.183.174
      0100 .... = Version: 4
      .... 0101 = Header Length: 20 bytes (5)
   Differentiated Services Field: 0x60 (DSCP: CS3, ECN: Not-ECT)
      Total Length: 92
      Identification: 0x4a6d (19053)
    ▶ 000. .... = Flags: 0x0
       ..0 0000 0000 0000 = Fragment Offset: 0
    Time to Live: 1
      Protocol: ICMP (1)
```

In Kali Linux:-

```
Internet Control Message Protocol
  Type: 11 (Time-to-live exceeded)
  Code: 0 (Time to live exceeded in transit)
  Checksum: 0x8c38 [correct]
  [Checksum Status: Good]
  Unused: 00000000
▼ Internet Protocol Version 4, Src: 192.168.1.14, Dst: 142.250.70.78
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
  Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
    Total Length: 60
    Identification: 0x49dc (18908)
   ▶ 000. .... = Flags: 0x0
    ...0 0000 0000 0000 = Fragment Offset: 0
  ▶ Time to Live: 1
    Protocol: UDP (17)
```

Q3. Examine the ICMP echo packet.

Q4. Examine the ICMP error packet.

```
Internet Control Message Protocol
         Type: 11 (Time-to-live exceeded)
         Code: 0 (Time to live exceeded in transit)
         Checksum: 0xf4ff [correct]
         [Checksum Status: Good]
         Unused: 00000000
       Internet Protocol Version 4, Src: 192.168.1.15, Dst: 142.250.183.174
        Internet Control Message Protocol
            Type: 8 (Echo (ping) request)
            Code: 0
            Checksum: 0xf7e9 [unverified] [in ICMP error packet]
            [Checksum Status: Unverified]
            Identifier (BE): 1 (0x0001)
            Identifier (LE): 256 (0x0100)
            Sequence Number (BE): 21 (0x0015)
            Sequence Number (LE): 5376 (0x1500)
          Data (64 bytes)
              [Length: 64]
Ans-
```