```
Internet Protocol Version 4, Src: 100.64.6.56, Dst: 100.64.0.1
     0100 .... = Version: 4
     .... 0101 = Header Length: 20 bytes (5)
  v 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: 61
    Identification: 0xdd40 (56640)

√ Flags: 0x00

       0... = Reserved bit: Not set
        .0.. .... = Don't fragment: Not set
       ..0. .... = More fragments: Not set
     Fragment Offset: 0
     Time to Live: 128
    Protocol: UDP (17)
     Header Checksum: 0x0000 [validation disabled]
     [Header checksum status: Unverified]
    Source Address: 100.64.6.56
     Destination Address: 100.64.0.1
> User Datagram Protocol, Src Port: 52447, Dst Port: 53
> Domain Name System (query)
```

Header Field	Description	Hexidecimal Value	DecimalValue/Te xt
The IP protocol version number	Version 4 or 6	0800	Version: 4
The 4-bit header length	Specifies the number of 32-bit words in the header.	45	0100=Version: 4
8-bit type of service	As an example, voice over IP in order to prioritize traffic.	00	Differentiated Services Codepoint: Default (0)
The datagram length in the number of bytes	Includes header and data and comprises the remaining 16 bits.	00 3d	Total Length: 61
The ID and Flag	Used to identify and control	00	0 = Reserved bit: Not

fields	fragments.		set .0 = Don't fragment: Not set0 = More fragments: Not set
The fragment offset	Used for fragmentation/reassembly.	00 00	Fragment Offset: 0
The time to live	The allowed maximum number of remaining hops, decremented at each router.	80	Time to Live: 128
The upper layer protocol		11	protocol: UDP (17)
The header checksum	Performs error checking on the header.	00 00	Header Checksum: 0x0000 [validation disabled]
Source IP Address	Source address the packet is coming from	64 40 06 38	Source Address: 100.64.6.56
Destination IP Address	Destination address of where the packet is going	64 40 00 01	Destination Address: 100.64.0.1
The options	Follows the source and destination addresses. The options can be used for source route, i.e., specifying	N/A	N/A

recording the IP address of each hop. They are rarely used for security reasons.	the IP address of each hop, and route record, i.e.,	
	each hop. They are rarely	