IPV6

Version:

For ipv6 the version is 6 so 0110 represents the ipv6.

Traffic class:

This filed is used for congestion control. DSCP is used for setting the priority and ECN is used for showing the presence of congestion. Since there is no congestion in our data so both DSCP and ECN are 0.

Flow Label:

Flow label is used for real time data transfer i.e virtual circuit. If the bits are present in the flow label then all the packets are transferred through a same path instead of different paths. In our data the flow label is 0 so no virtual circuit is created and the packets can follow any path to reach the destination.

Payload Length:

The length of the payload is 30.

Next Header:

Next header represents the extension header of the current header. In out data, the next header is ICMPV6 which is the extension of the current header. Using this feature, we can send data up to 4GB at a time.

Hop Limit:

Hop limit represents the number of hop after which the packet is dropped. In our context, the hop limit is 255 i.e after 255 hops, the packet is dropped. It is done to prevent the congestion caused due to looping of a packet.

Source and Destination Address:

This contains the address of source and destination.