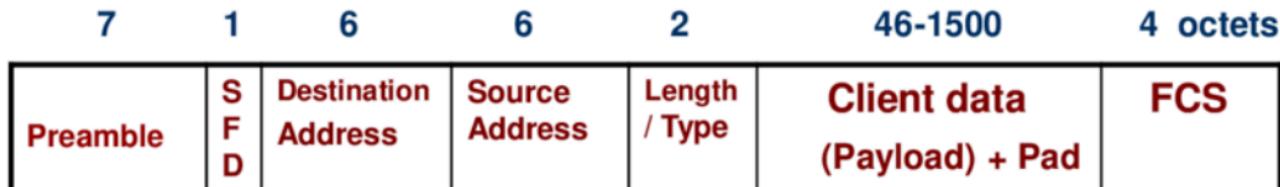


- Ethernet uses the **frame format** represented below. This format has **remained invariant** despite the rapid development in Ethernet speeds and different physical layer technologies.



- Preamble**: sequence of 7 octets (0101....) permits the recovery of the signal clock in the receiver, when it operates in burst mode.
- SFD (Start of Frame Delimiter)**: Pattern of 8 bits (10101011) that indicates the beginning of the frame.
- The **destination** and **source** address are fields with 6 octets.
- Length/type**: sequence of 2 octets to indicate the length of the data field ( $\leq 1500$ ) or the type of frame ( $\geq 1536$ ) (ex: data frames (IPV4, IPV6, MPLS, etc.) , 802.1Q, 802.1ad, control frame (faults, flow, etc.))
- FCS (Frame Check Sequence)**: Uses a four-octet CRC code calculated over all octets apart from the preamble and SFD fields.

CRC: Cyclic redundancy check