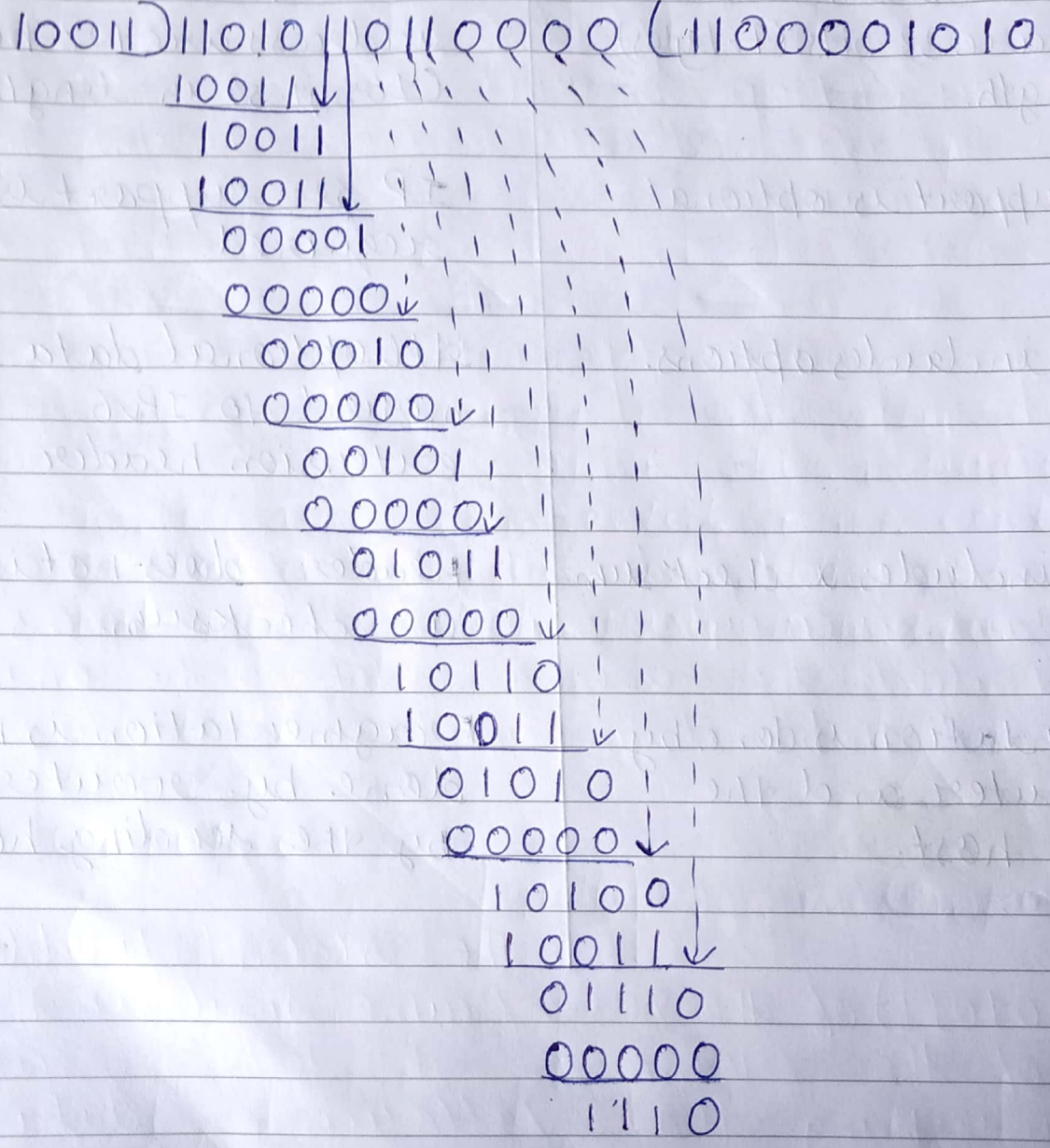
Q Consider the message frame 1101011011 for which the divisor is 10011. Calculate the CRC.



1100001010 1110 Ans

Ans IEEE 802.3 specifies one type of frame containing seven fields: preamble, SFD, DA SA, length/type of PDU, 802.2 frame and the CRC. The format of the MAC frame in CSMA CD is shown.

Preamble	SFD	DA	SA	LengthPDU	Data	CRC
7-bytes	1bytes	6bytes	6bytes	2 bytes	46-1500by.	4 bytes.

1. Preamble :→

The first field of the 802.3 frame, the preamble, contains seven bytes (56 bits) of alternating 0's and 1's that alerts the receiving system to the coming frame and enable it to synchronize its input timing.

2. Start Frame Delimiter (SFD) :→

The second field (one byte: 10101011) of the 802.3 frame sigals at the begining of the frame. The SFD tells the receiv that everything that following is data, starting with the addresses.

3. Destination Address (DA) :→

The Destination Address (DA) field is allotted six bytes and contains the physical address of the packet's next destination. A system's physical address is a bit pattern encoded on its Network Interface Card (NIC).

4. Source Address (SA) :→

The source address (SA) field is also allotted six bytes and contains the physical address of the last device to forward the packet.

5. Length/type of Protocol Data Unit :-)

These next two bytes indicate the number of bytes in the coming PDU. If the length of the PDU is fixed

6. Data :→

This field can be split up into two part Data (0-1500 bytes) and padding (0-46) bytes

.. CRC :→

The last field in the 802.3 frame contains the error detection information. in the case a CRC-32.