

## Algorithm for Bit–Stuffing

1. Start
2. Initialize the array for transmitted stream with the special bit pattern *0111 1110* which indicates the beginning of the frame.
3. Get the bit stream to be transmitted in to the array.
4. Check for five consecutive ones and if they occur, stuff a bit *0*
5. Display the data transmitted as it appears on the data line after appending *0111 1110* at the end
6. For de–stuffing, copy the transmitted data to another array after detecting the stuffed bits
7. Display the received bit stream
8. Stop

## Algorithm for Character stuffing

1. Start
2. Append DLE STX at the beginning of the string
3. Check the data if character is present; if character DLE is present in the string (example DOODLE) insert another DLE in the string (ex: DOODLEDLE)
4. Transmit DLE ETX at the end of the string
5. Display the string
6. Stop

## Algorithm for Character De–stuffing

1. Start
2. Neglect initial DLE STX
3. If DLE is present in the text, neglect it; if another DLE follows, copy the same to output.
4. Neglect the trailing DLE ETX
5. Stop