**Bit stuffing**

#include <stdio.h>#include <string.h>#define MAX\_SIZE 1024// Function to perform bit stuffingvoid bitStuffing(char \*data, char \*stuffedData) {    int i, j;    int count = 0;    int length = strlen(data);        j = 0;    for (i = 0; i < length; i++) {        stuffedData[j++] = data[i];        if (data[i] == '1') {            count++;            // Insert a 0 after 5 consecutive 1s            if (count == 5) {                stuffedData[j++] = '0';                count = 0; // Reset count after stuffing            }        } else {            count = 0; // Reset count on '0'        }    }    stuffedData[j] = '\0'; // Null-terminate the stuffed data}int main() {    char data[MAX\_SIZE];    char stuffedData[MAX\_SIZE];    // Example data    printf("Enter the data to be stuffed: ");    scanf("%s", data);    // Perform bit stuffing    bitStuffing(data, stuffedData);    // Output the stuffed data    printf("Original Data: %s\n", data);    printf("Stuffed Data: %s\n", stuffedData);    return 0;}