BIT STUFFING:

#include <stdio.h>

#include <string.h>

// Function for bit stuffing

void bitStuffing(int N, int arr[])

{

// Stores the stuffed array

int brr[30];

// Variables to traverse arrays

int i, j, k;

i = 0;

j = 0;

// Loop to traverse in the range [0, N)

while (i < N) {

// If the current bit is a set bit

if (arr[i] == 1) {

// Stores the count of consecutive ones

int count = 1;

// Insert into array brr[]

brr[j] = arr[i];

// Loop to check for

// next 5 bits

for (k = i + 1;

arr[k] == 1 && k < N && count < 5; k++) {

j++;

brr[j] = arr[k];

count++;

// If 5 consecutive set bits

// are found insert a 0 bit

if (count == 5) {

j++;

brr[j] = 0;

}

i = k;

}

}

// Otherwise insert arr[i] into

// the array brr[]

else {

brr[j] = arr[i];

}

i++;

j++;

}

// Print Answer

for (i = 0; i < j; i++)

printf("%d", brr[i]);

}

// Driver Code

int main()

{

int N ;

int arr[100] ;

printf("Enter number of elements: ");

scanf("%d",&N);

printf("Enter elements");

for(int i=0;i<N;i++)

{

scanf("%d",&arr[i]);

}

bitStuffing(N, arr);

return 0;

}

O/P:

