**32. Implementation of Bit stuffing mechanism using C.**

**#include <stdio.h>**

**#include <string.h>**

**#define MAX 100**

**// Function for bit stuffing**

**void bitStuffing(int input[], int n) {**

**int stuffed[MAX], i, j = 0, count = 0;**

**printf("Stuffed Bit Stream: ");**

**for (i = 0; i < n; i++) {**

**stuffed[j++] = input[i];**

**if (input[i] == 1) {**

**count++;**

**if (count == 5) {**

**stuffed[j++] = 0; // Insert 0 after five consecutive 1s**

**count = 0;**

**}**

**} else {**

**count = 0;**

**}**

**}**

**// Print stuffed bit sequence**

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

**printf("%d", stuffed[i]);**

**printf("\n");**

**}**

**int main() {**

**int input[MAX], n, i;**

**printf("Enter number of bits: ");**

**scanf("%d", &n);**

**printf("Enter the bit stream (0s and 1s only): ");**

**for (i = 0; i < n; i++)**

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

**bitStuffing(input, n);**

**return 0;**

**}**

**A screenshot of a computer

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