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Lab Practical #15:

Implementation of parity bit check Using C/Java language with example.

Practical Assignment #15:

C/Java Program: Implementation of Bit stuffing Using C/Java language.

1. **Enter the binary data: 011111101111110**
   Bit-stuffed data: 01111101011111010
2. **Enter the binary data: 111110111111**
   Bit-stuffed data: 1 1 1 1 1 0 0 1 1 1 1 1 0 1

→ **Code: -**

```c
#include <stdio.h>
#include <string.h>

int main() {
    char data[100], stuffed[200];
    int i, j = 0, count = 0;

    printf("Enter the binary data: ");
    scanf("%s", data);

    for (i = 0; i < strlen(data); i++) {
        stuffed[j++] = data[i];
        if (data[i] == '1') {
            count++;
            if (count == 5) {   // After 5 consecutive 1s, stuff a 0
                stuffed[j++] = '0';
                count = 0;
            }
        } else {
            count = 0;
        }
    }
    stuffed[j] = '\0';

    printf("Bit-stuffed data: %s\n", stuffed);

    return 0;
}
```