**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.**

import java.util.Scanner;

public class BitStuffing {

public static String stuffBits(String data) {

StringBuilder stuffed = new StringBuilder();

int count = 0;

for (char bit : data.toCharArray()) {

stuffed.append(bit);

if (bit == '1') {

count++;

if (count == 5) {

stuffed.append('0');

count = 0;

}

} else {

count = 0;

}

}

return stuffed.toString();

}

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter binary data: ");

String data = scanner.nextLine();

String stuffed = stuffBits(data);

System.out.println("Stuffed Data: " + stuffed);

scanner.close();

}

}

**Input:**

Enter the binary data: 011111101111110

**Output:**

Bit-stuffed data: 01111101011111010

**Input:**

Enter the binary data: 111110111111

**Output:**

Bit-stuffed data: 1 1 1 1 1 0 0 1 1 1 1 1 0 1