Date: 10/09/2025

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.

```java
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();
  }
```

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```java
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