



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.

```
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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```
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();  
}  
}
```

- 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 0 1