



Department of Computer Engineering
Class: T.Y. B.Tech Semester: V

Course Code: DJ19CEL405

Course Name: Computer Networks Lab

Name: Arnav Deo	SAP ID: 60004230285
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Experiment No: 2

Aim: Write a program to implement Framing:

Techniques: Character count, Byte stuffing, Bit stuffing

Program:

```
import java.util.Scanner;

public class Charcount{

    public static void main(String []args){

        Scanner sc= new Scanner(System.in);

        System.out.println("Enter first string :");

        String str1=sc.nextLine();

        System.out.println("Enter second string :");

        String str2=sc.nextLine();

        int len1=str1.length()+1;

        int len2=str2.length()+1;

        String result= len1+str1+len2+str2;

        System.out.println("Output : "+result);

        sc.close();

    }

}
```



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```
import java.util.Scanner;

public class ByteStuffing {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter string : ");
        String str = sc.nextLine();
        System.out.println("Enter start character :");
        char start = sc.next().charAt(0);
        System.out.println("Enter end character :");
        char end = sc.next().charAt(0);
        System.out.println("Enter escape character :");
        char esc = sc.next().charAt(0);
        StringBuilder result = new StringBuilder();
        for (char c : str.toCharArray()) {
            if (c == start || c == end) {
                result.append(esc);
            }
            result.append(c);
        }
        System.out.println("Output :" + start +
result.toString() + end);
        sc.close();
    }
}
```



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Screenshots:

```
arnitdo Experiment 2 Framing java ByteStuffing
Enter string :
ComputerNetworks
Enter start character :
C
Enter end character :
N
Enter escape character :
$
Output :C$Computer$NetworksN
```

```
arnitdo Experiment 2 Framing java ByteStuffing
Enter string :
ComputerNetworks
Enter start character :
C
Enter end character :
N
Enter escape character :
$
Output :C$Computer$NetworksN
```

Conclusion:

Thus, we have studied and implemented the various framing techniques.