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**// Roll No: 3**

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

#define ESC "ESC"

void byteStuffing(char* input, char* stuffedData, char* flag) {
    int i, j = 0;
    int length = strlen(input);

    for (i = 0; i < length; i++) {
        if (input[i] == flag[0] || input[i] == ESC[0]) {
            strcpy(&stuffedData[j], ESC);
            j += strlen(ESC); // Increment j by length of ESC
        }

        stuffedData[j] = input[i];
        j++;
    }

    stuffedData[j] = '\0';
}

int main()
{
    char input[100], stuffedData[200], flag[20];

    printf("Enter the string of input byte: ");
    scanf("%s", input);

    printf("Enter the stuffing byte as flag: ");
    scanf("%s", flag);

    printf("The Un-Stuffed string is: %s\n", input);
    byteStuffing(input, stuffedData, flag);
    printf("The Stuffed String is: %s\n",
        stuffedData);
    printf("Output with flags: %s%s%s\n", flag, stuffedData, flag);

    return 0;
}
```

### Output :

```
C:\Users\Admin\Documents\C Prog_SYCSE\Direct\CN_6B.exe
Enter the string of input byte: Rakesh
Enter the stuffing byte as flag: k
The Un-Stuffed string is: Rakesh
The Stuffed String is: RaESCKesh
Output with flags: kRaESCKeshk

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Process exited after 27.61 seconds with return value 0
Press any key to continue . . .
```