

Bit stuffing and destuffing

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

```
#include<stdlib.h>
```

```
#define MAXSIZE 100
```

```
int main()
```

```
{
```

```
    char *p,*q;
```

```
    char temp;
```

```
    char in[MAXSIZE];
```

```
    char stuff[MAXSIZE];
```

```
    char destuff[MAXSIZE];
```

```
    int count=0;
```

```
    printf("enter the input character string (0's & 1's only):\n");
```

```
    scanf("%s",in);
```

```
    p=in;
```

```
    q=stuff;
```

```
    while(*p!='\0')
```

```
    {
```

```
        if(*p=='0')
```

```
        {
```

```
            *q=*p;
```

```
    q++;
    p++;
}
else
{
    while(*p=='1' && count!=5)
    {
        count++;
        *q=*p;
        q++;
        p++;
    }

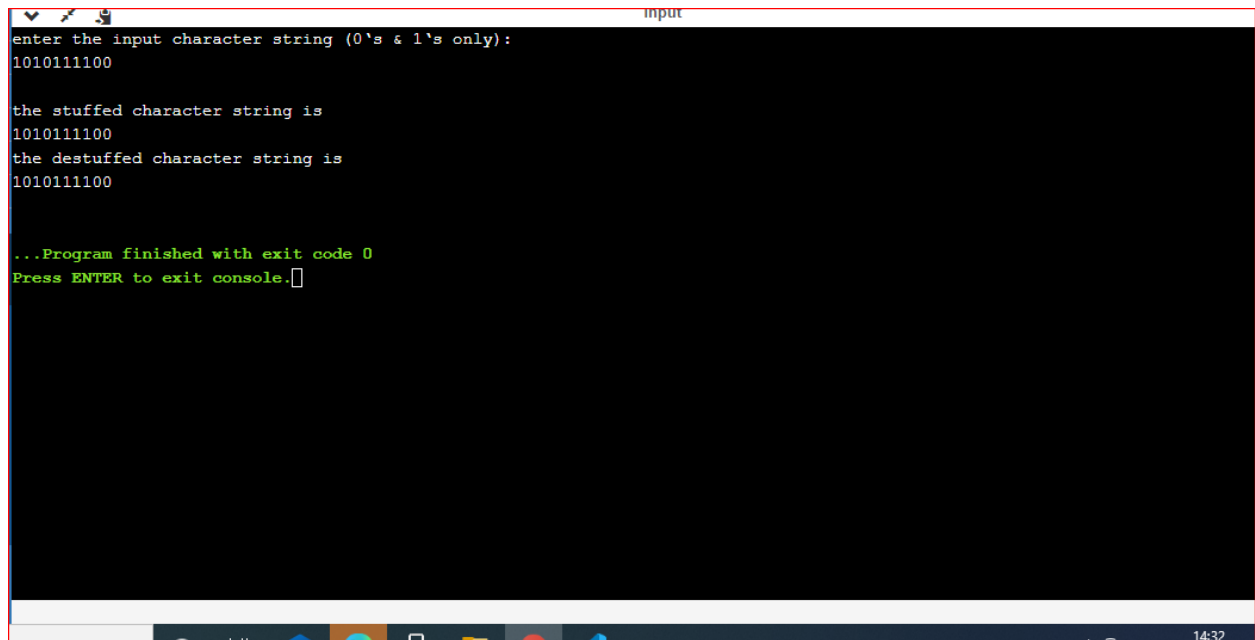
    if(count==5)
    {
        *q='0';
        q++;
    }
    count=0;
}
}
*q='\0';

printf("\nthe stuffed character string is");
printf("\n%s",stuff);

p=stuff;
```

```
q=destuff;
while(*p!='\0')
{
    if(*p=='0')
    {
        *q=*p;
        q++;
        p++;
    }
    else
    {
        while(*p=='1' && count!=5)
        {
            count++;
            *q=*p;
            q++;
            p++;
        }
        if(count==5)
        {
            p++;
        }
        count=0;
    }
}
*q='\0';
```

```
printf("\nthe destuffed character string is");  
  
printf("\n%s\n",destuff);  
  
return 0;  
  
}
```



```
input  
enter the input character string (0's & 1's only):  
1010111100  
  
the stuffed character string is  
1010111100  
the destuffed character string is  
1010111100  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```