Bit stuffing and destuffing

```c
#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;
```

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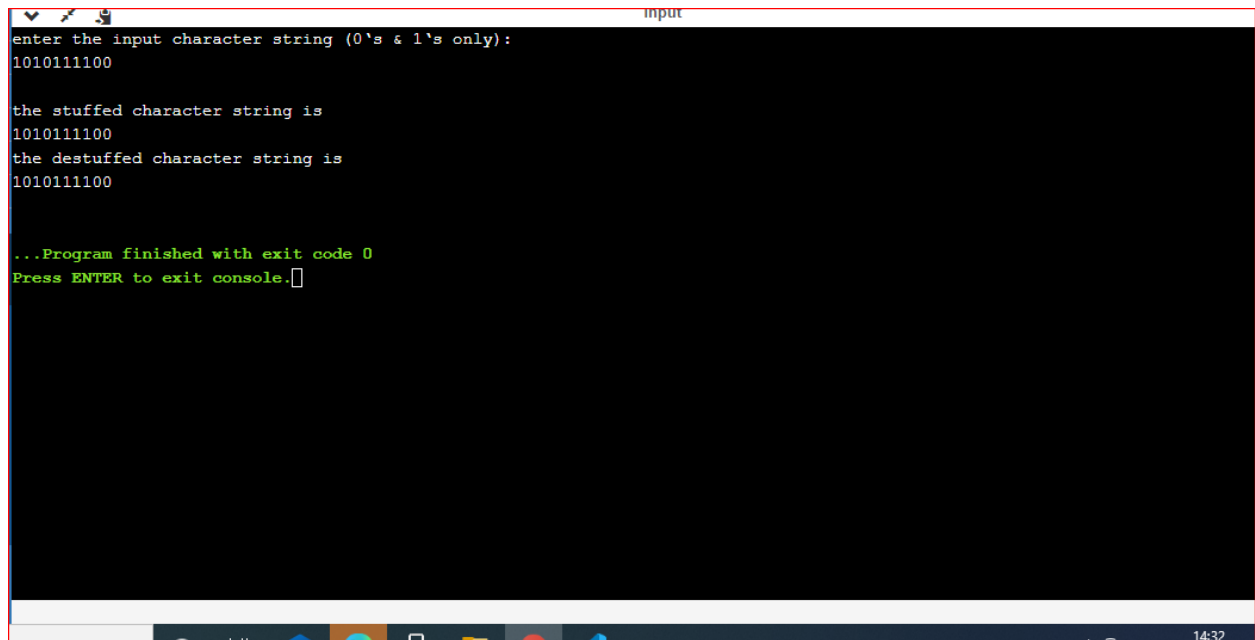
```c
q=destuff;
while(*p!='\0')
{
  if(*p=='0')
  {
    *q=*p;
    q++;
    p++;
  }
  else
  {
    while(*p=='1' && count!=5)
    {
      count++;
      *q=*p;
      q++;
      p++;
    }
    if(count==5)
    {
      p++;
    }
    count=0;
  }
}
*q='\0';
```

```c
    printf("\nthe destuffed character string is");

    printf("\n%s\n",destuff);

    return 0;

}
```