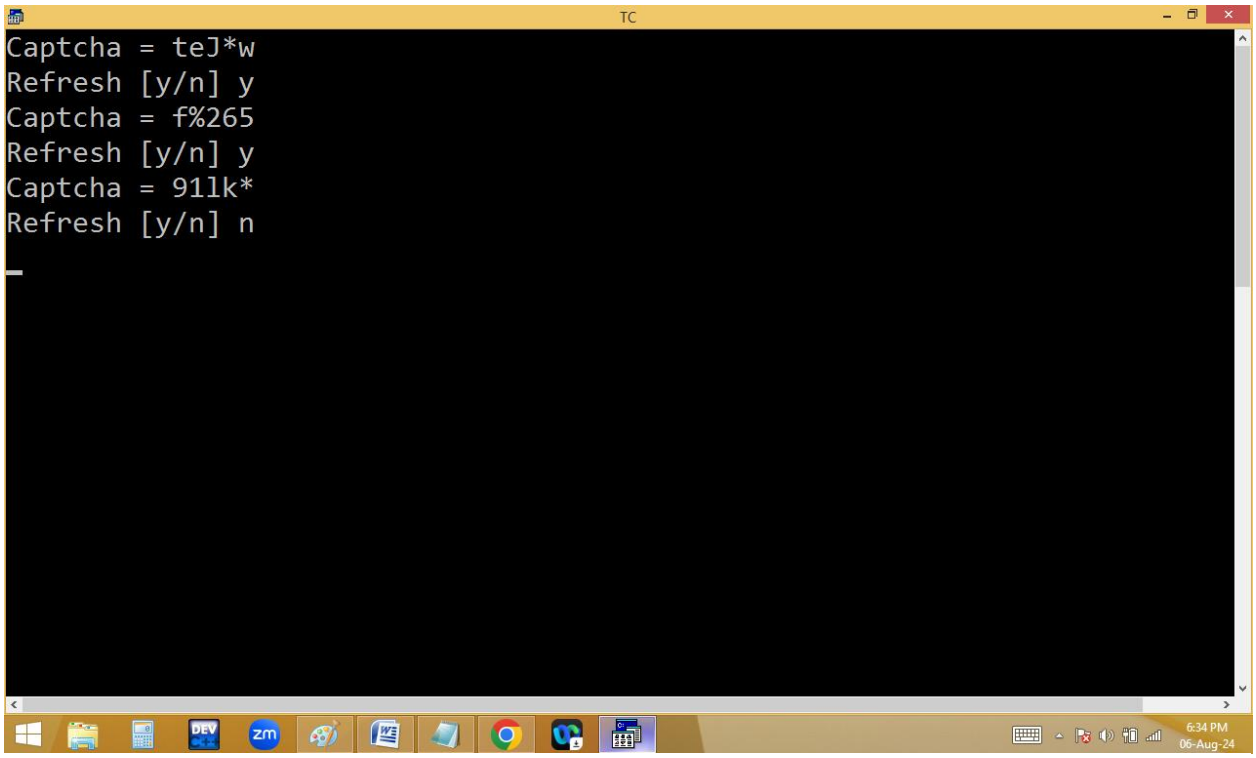
Captcha code generation:

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
void main()
{
char s[10],sp[]="@#$%&*",ch; int n,i;
clrscr();
while(1)
{randomize();
for(i=0;i<5;i++)
{
n=random(4);
if(n==0)s[i]=random(26)+97;
else if(n==1)s[i]=random(26)+65;
else if(n==2)s[i]=random(10)+48;
else s[i]=sp[random(6)];
```

```
}s[i]='\0';
printf("Captcha = %s\n",s);
flushall(); printf("Refresh [y/n] ");scanf("%c",&ch);
if(ch=='n'||ch=='N')break;
}
}
```




```
while(1)
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for(i=0;i<5;i++)
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n=random(4);
if(n==0)s[i]=random(26)+97;
else if(n==1)s[i]=random(26)+65;
else if(n==2)s[i]=random(10)+48;
else s[i]=sp[random(6)];
} s[i]='\0';
p(s);
```

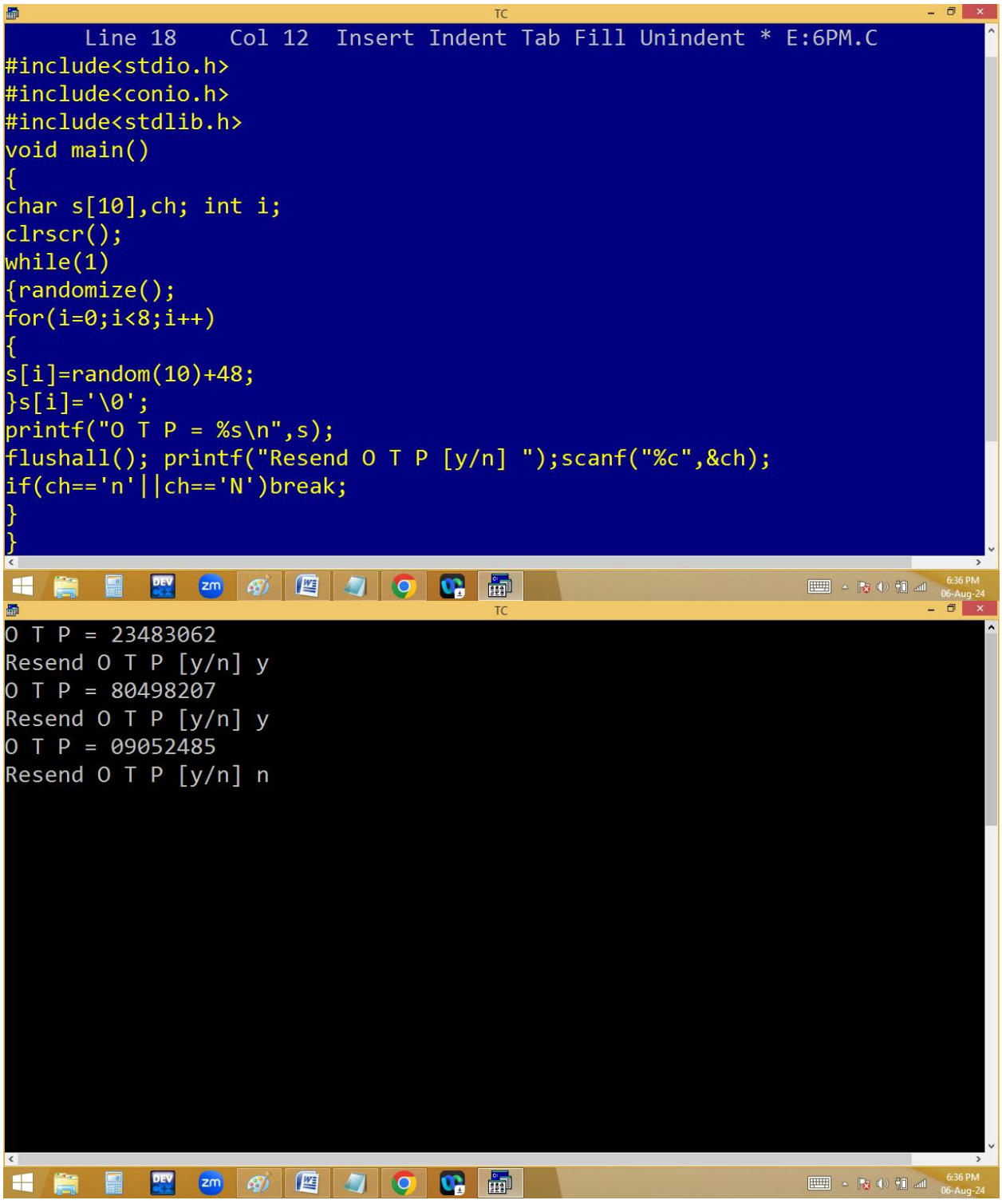
```
p("Refresh [y/n]");
s("%c",&ch);
if(ch=='n'||ch=='N')
break;
}
```

s

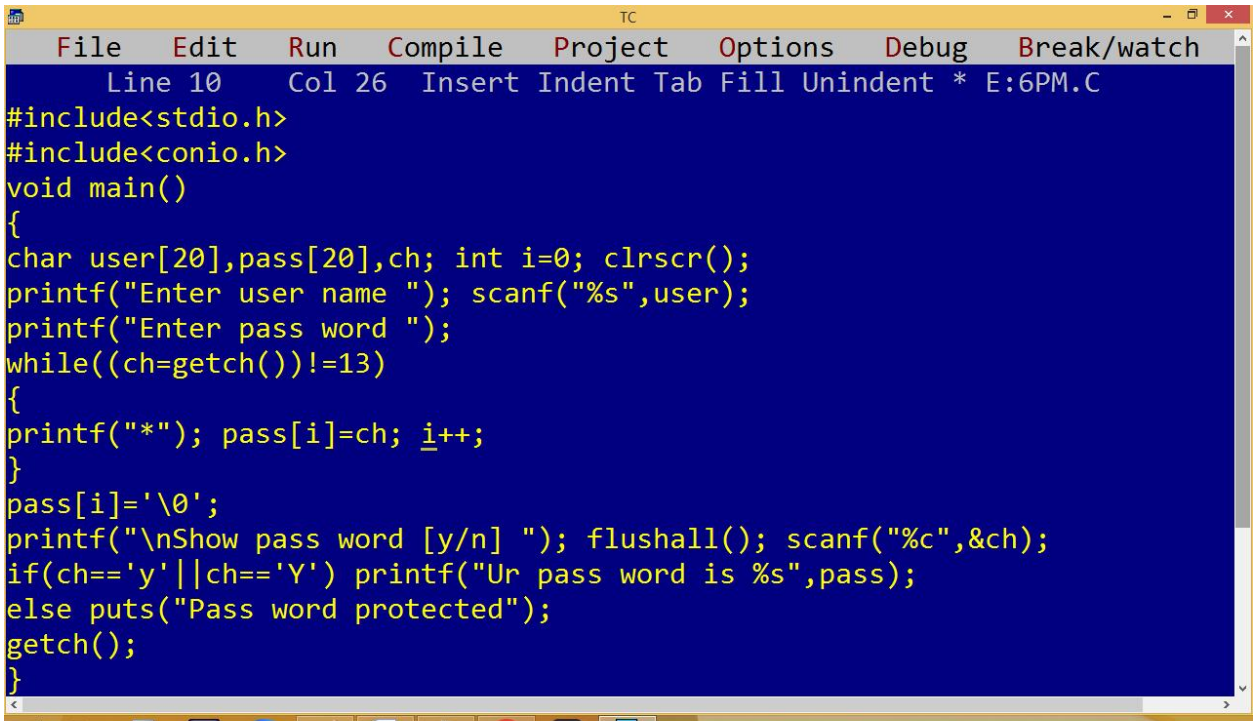
d	Z	5	$	A	\0	
0	1	2	3	4	5	6

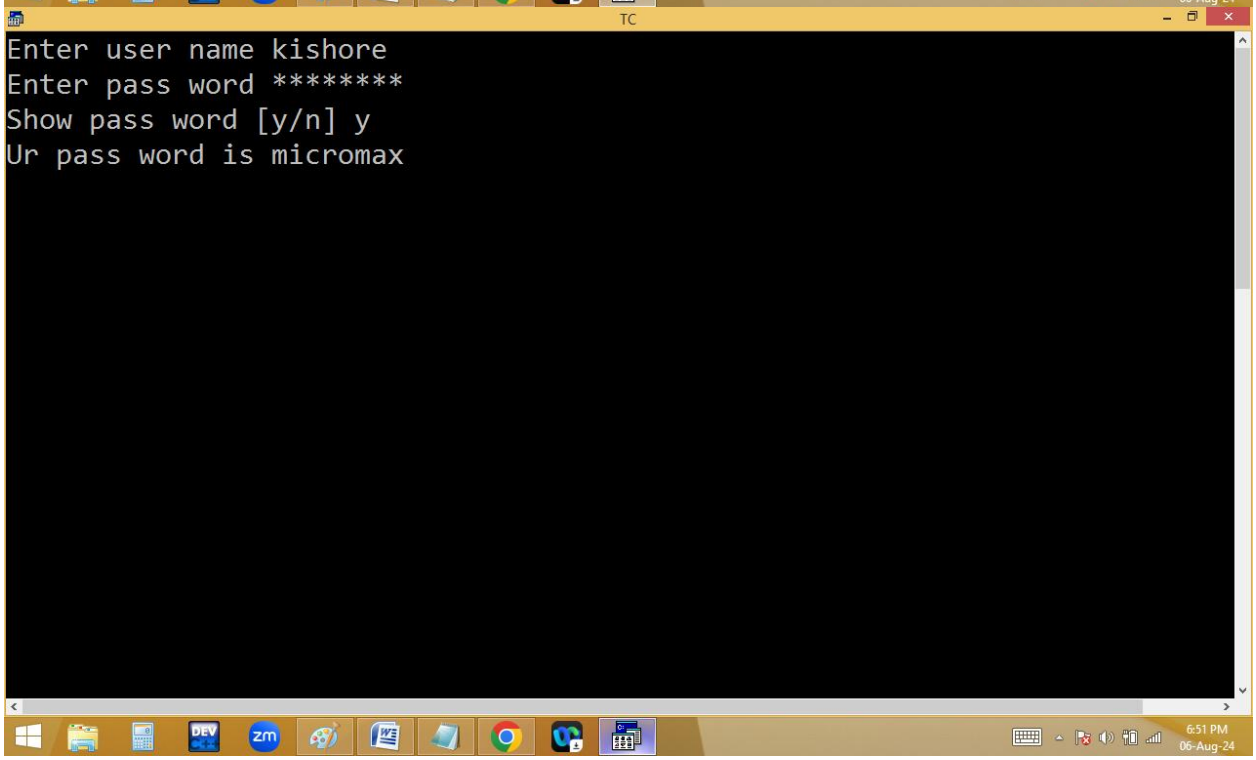
0-lower
1-upper
2-digits
3-special - @#$%*&

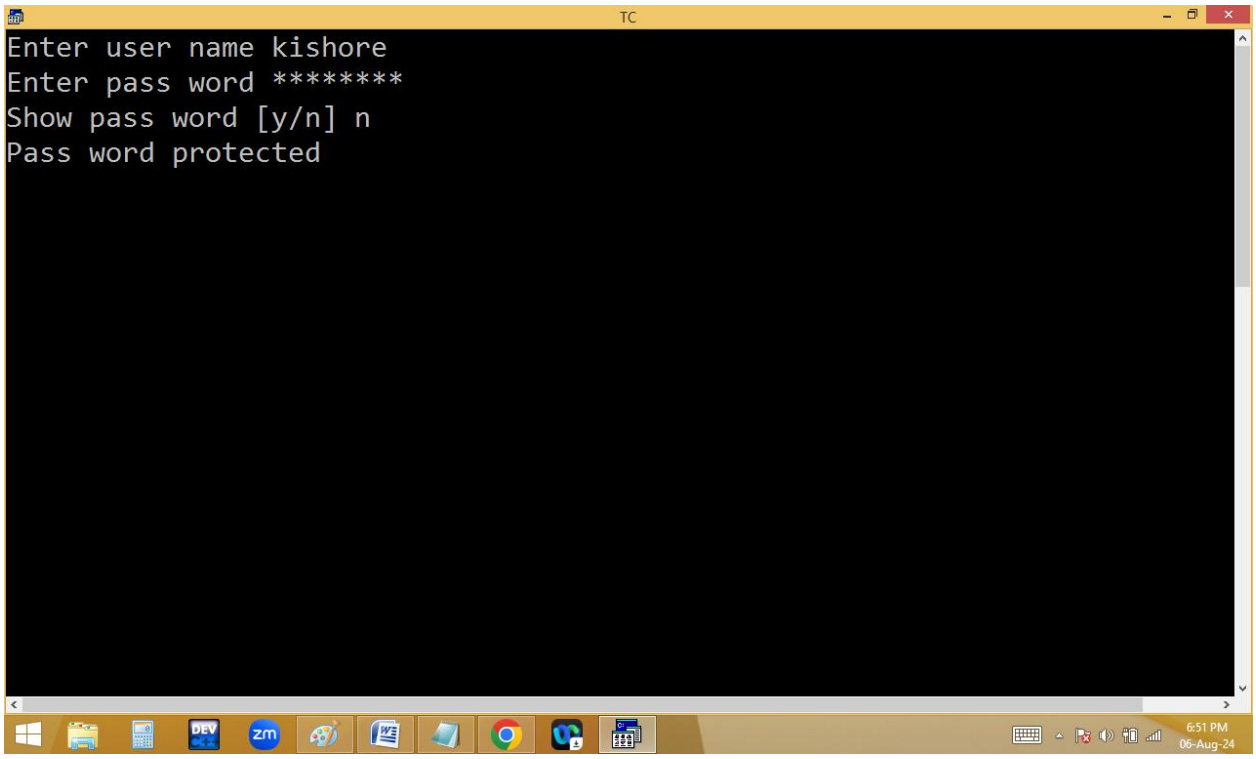
O T P Generation:



Password Generation:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 26 Insert Indent Tab Fill Unindent * E:6PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char user[20],pass[20],ch; int i=0; clrscr();
printf("Enter user name "); scanf("%s",user);
printf("Enter pass word ");
while((ch=getch())!=13)
{
printf("*"); pass[i]=ch; i++;
}
pass[i]='\0';
printf("\nShow pass word [y/n] "); flushall(); scanf("%c",&ch);
if(ch=='y'||ch=='Y') printf("Ur pass word is %s",pass);
else puts("Pass word protected");
getch();
}


TC
Enter user name kishore
Enter pass word ********
Show pass word [y/n] y
Ur pass word is micromax

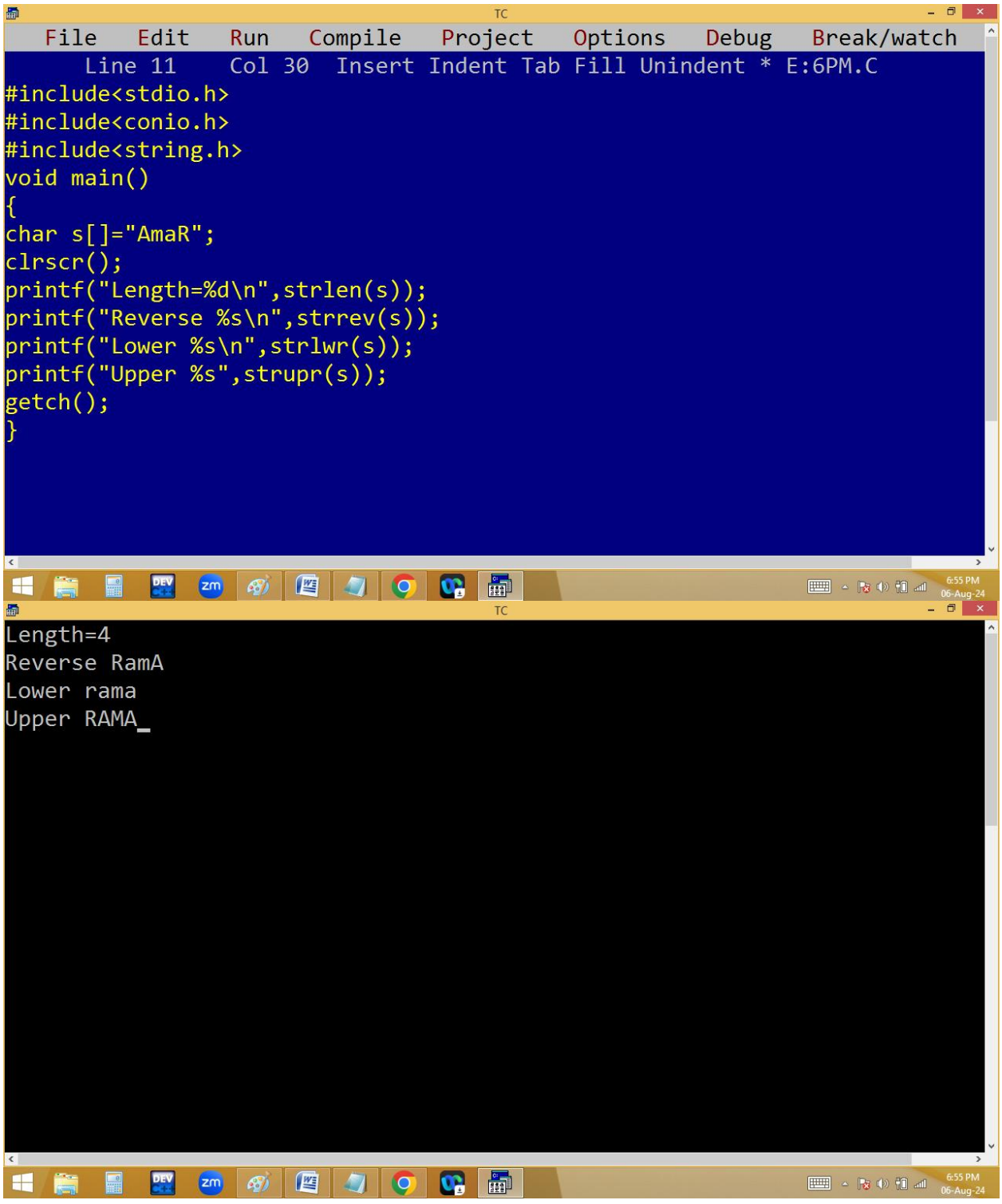


STRING LIBRARY FUNCTIONS

To manage string operations c provides several predefined functions available in string.h

They are

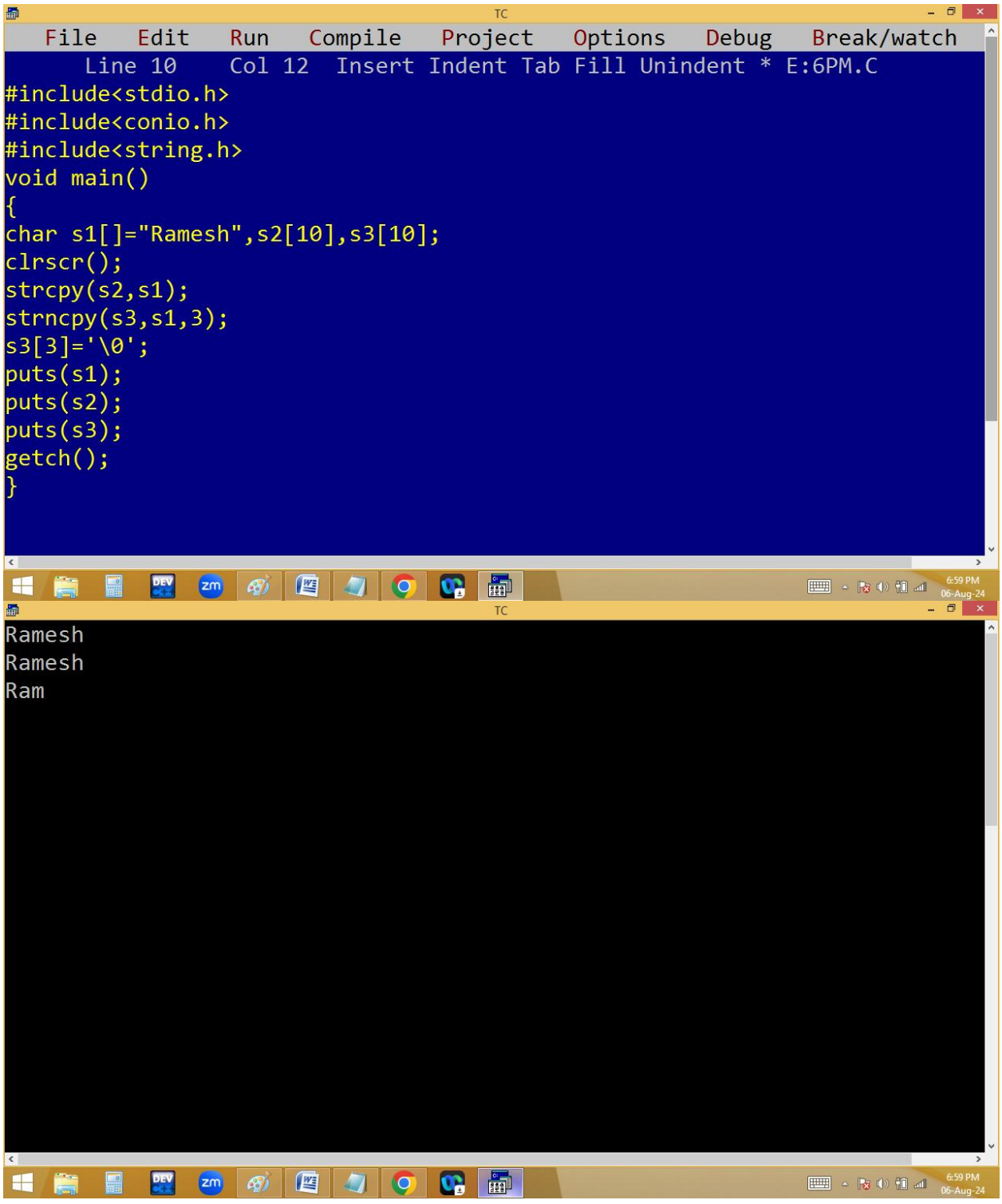
1. strlen(): Return the no of char's in given string.
2. strrev(): return reverse string
3. strlwr(): converts into lower case.
4. strupr(): converts into upper case.



5. **strcpy()**: It copies source string into destination string.

Strcpy(destination string, source string);

6. **strncpy()**: It copies specified no of char's into destination string.
   Strncpy(deststring, sourcestring, no of char's);

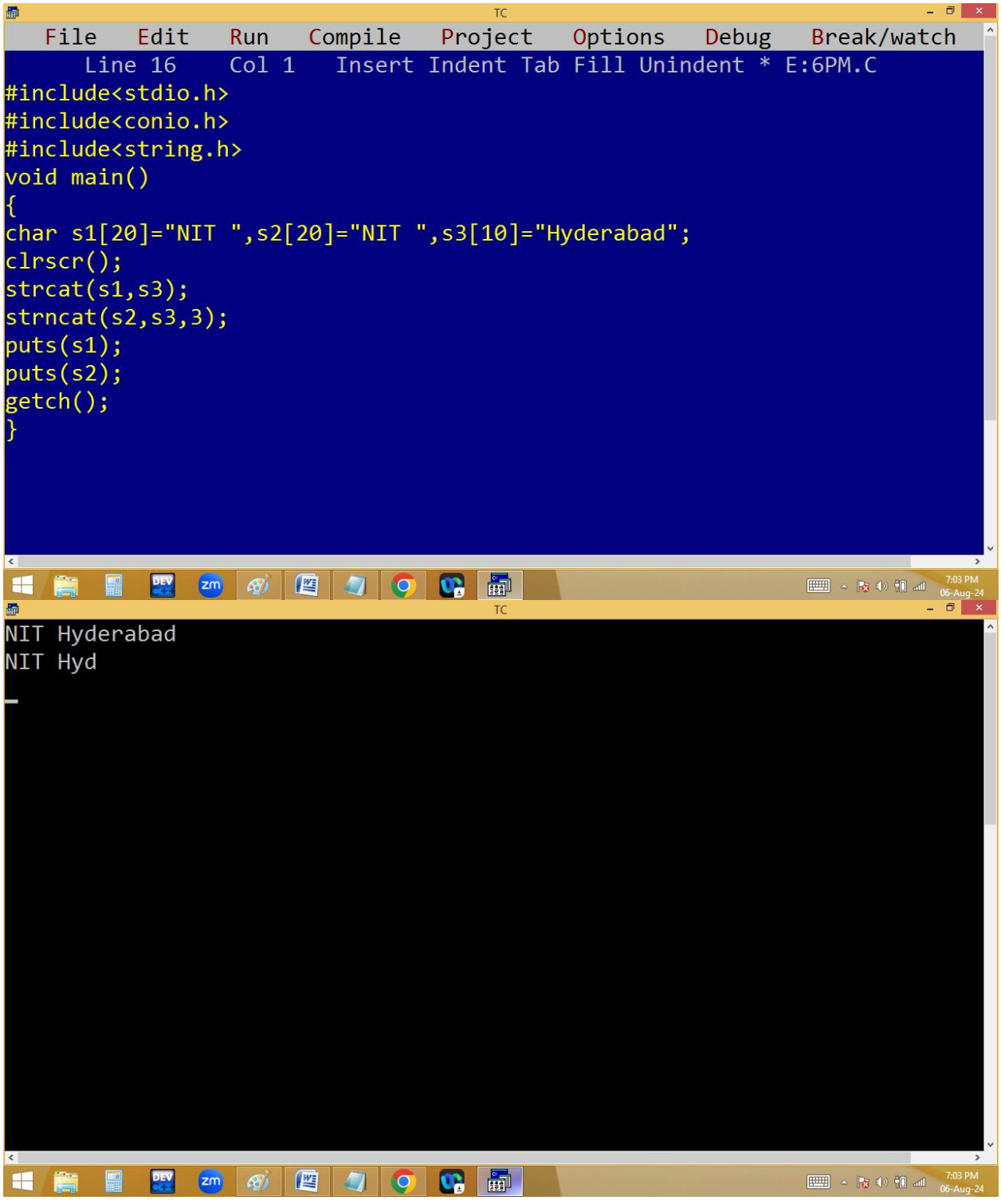


7. **strcat()**: It adds string2 to string1.

   Strcat(string1, string2);

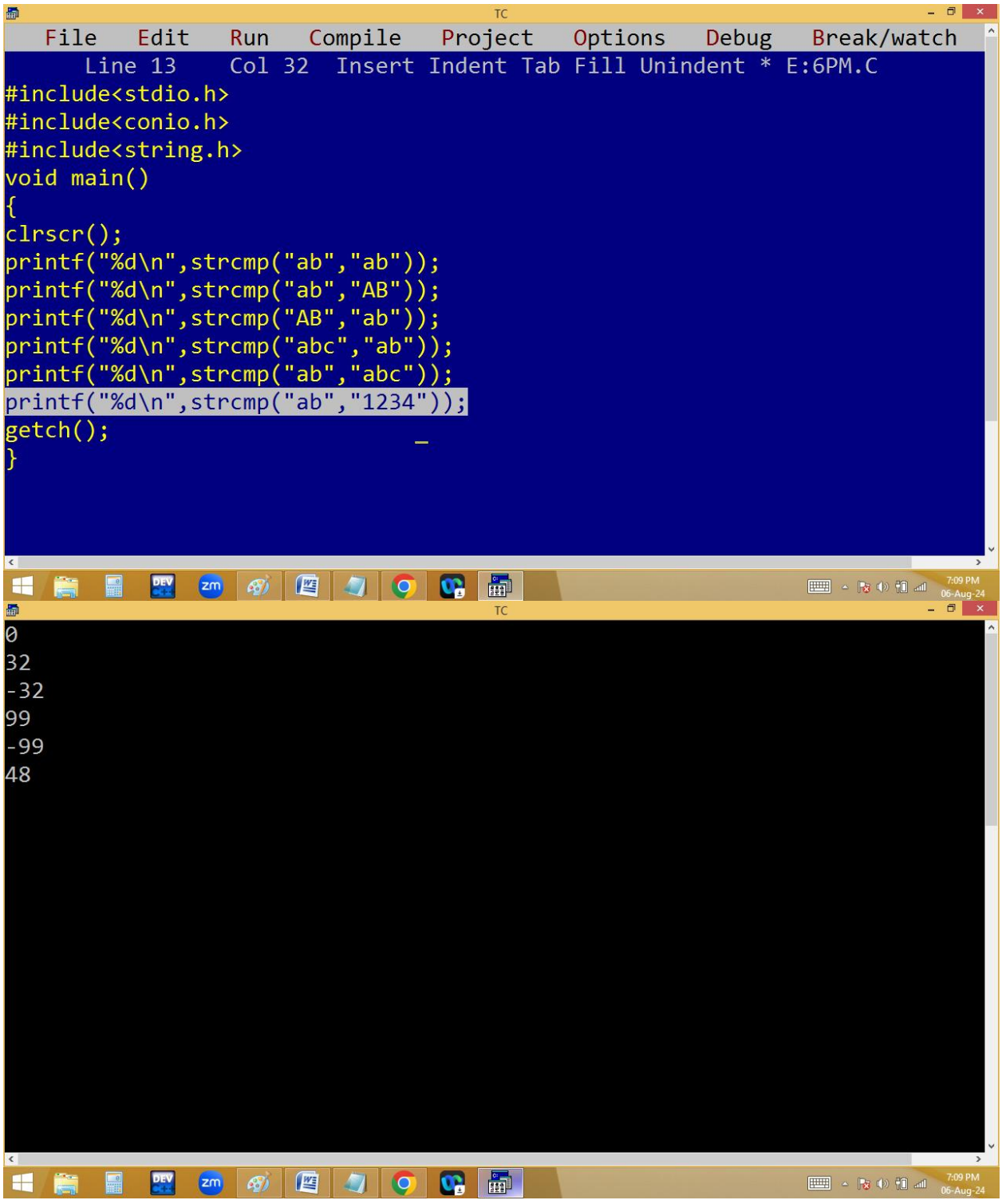
8. **strncat()**: It adds specified no of char's to string1.

   Strncat(string1, string2, no of char's);



9. **strcmp()**: It compare two string using ascii values and return the first ascii difference.

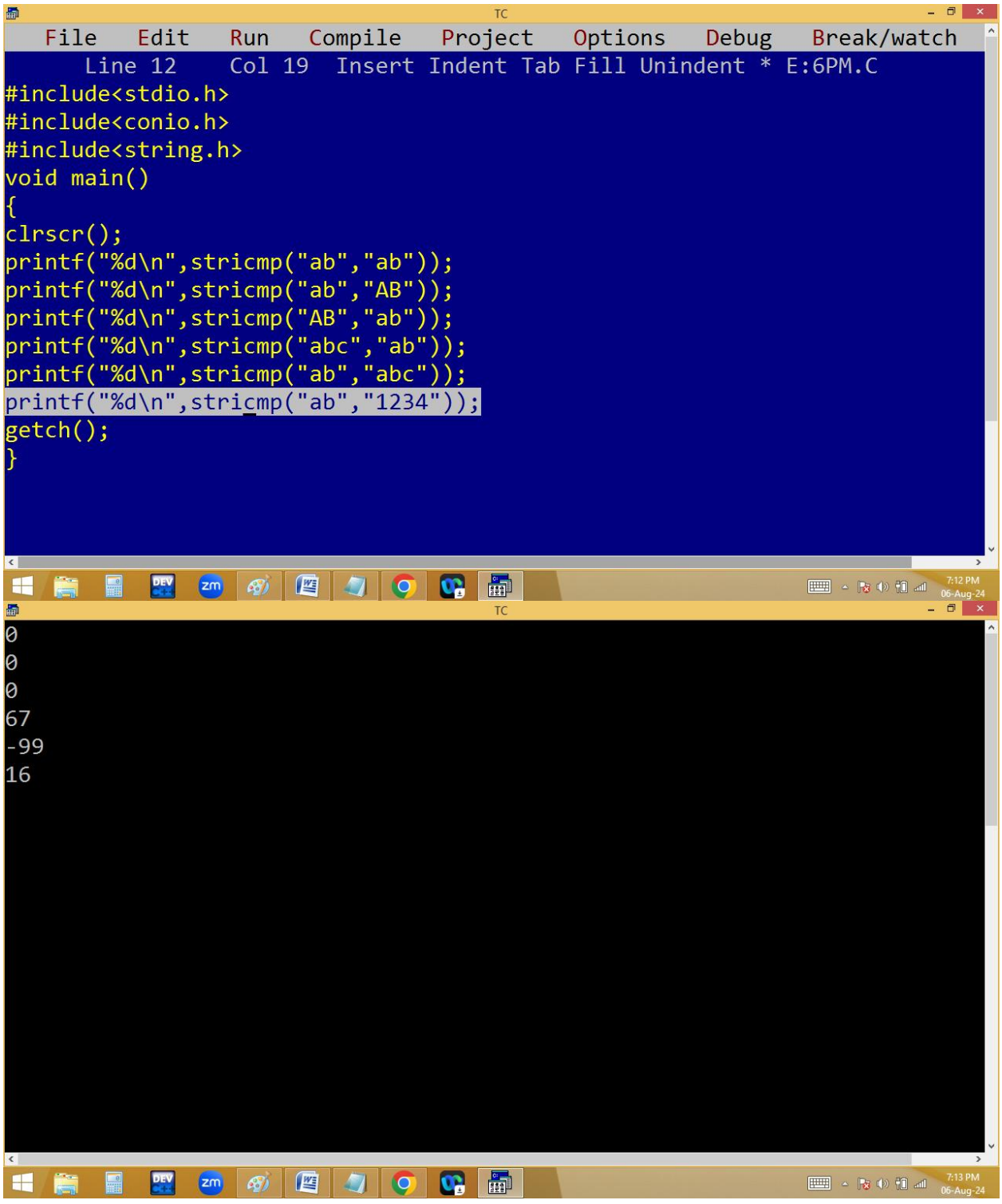
Strcmp(string1, string2);



10. **stricmp()**: it compare two strings by ignoring the case. i.e. in stricmp() lower and upper are same.

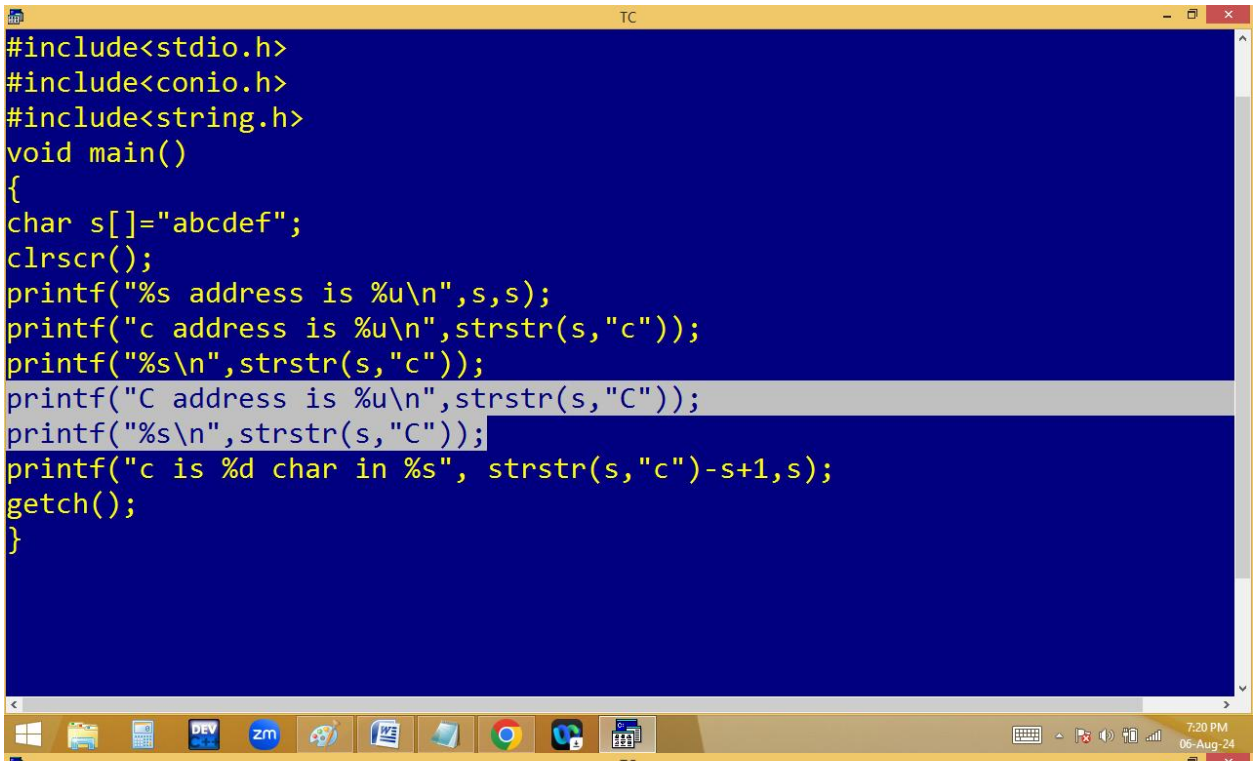
When matching char not found or different data type found in 2nd string, the 1st string char taken in upper case.

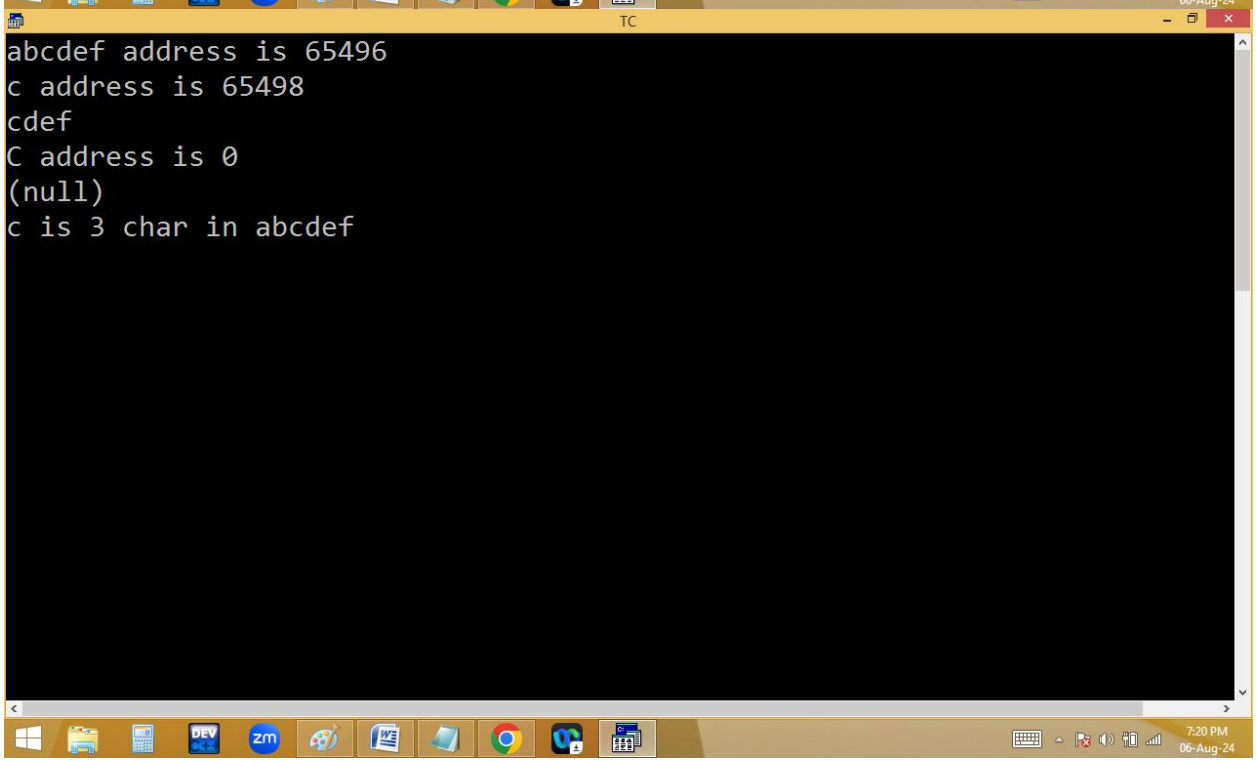
Stricmp(string1, string2);

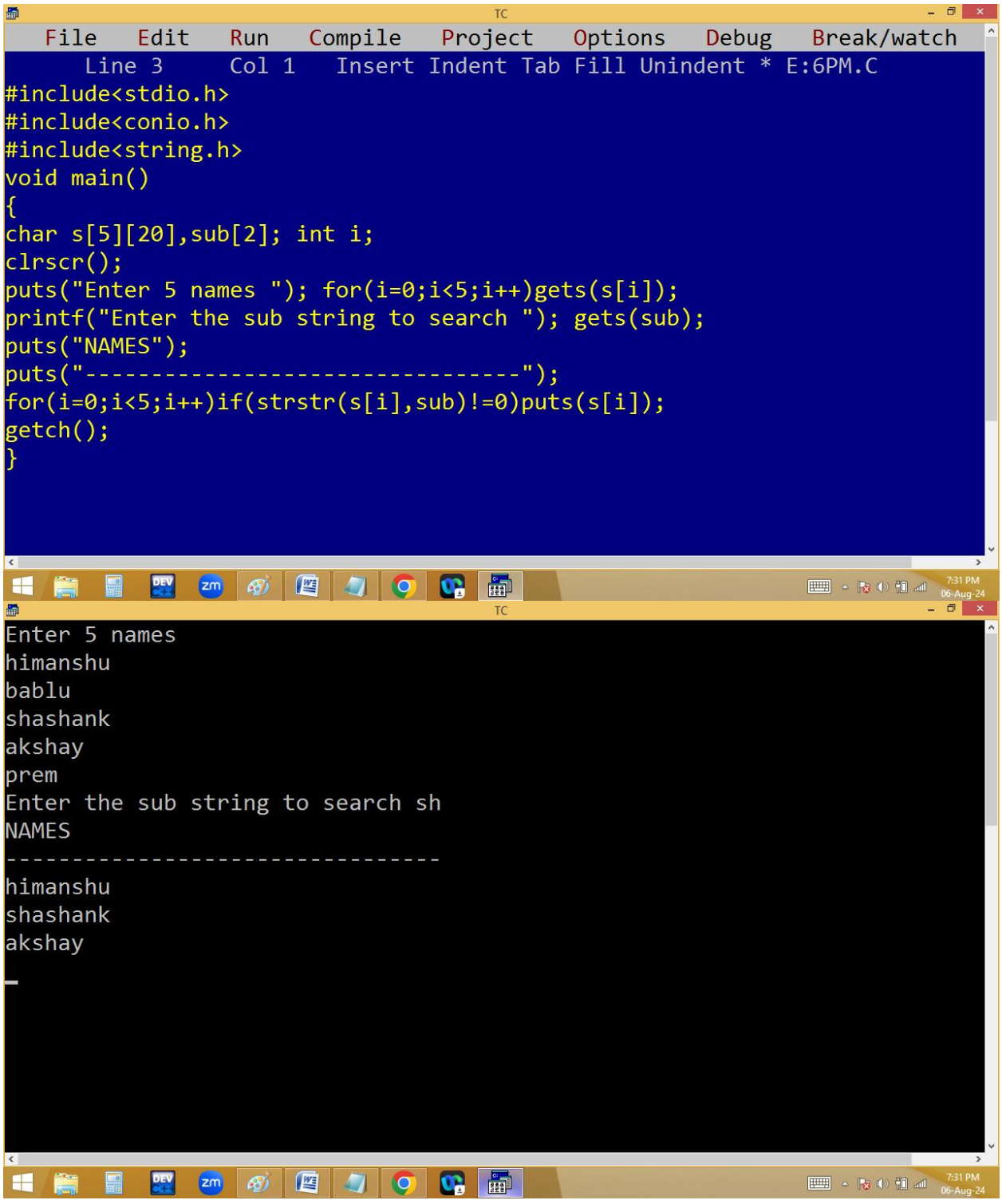


11. **strstr()**: it return the sub string address in main string. If sub string is not found, it return 0.

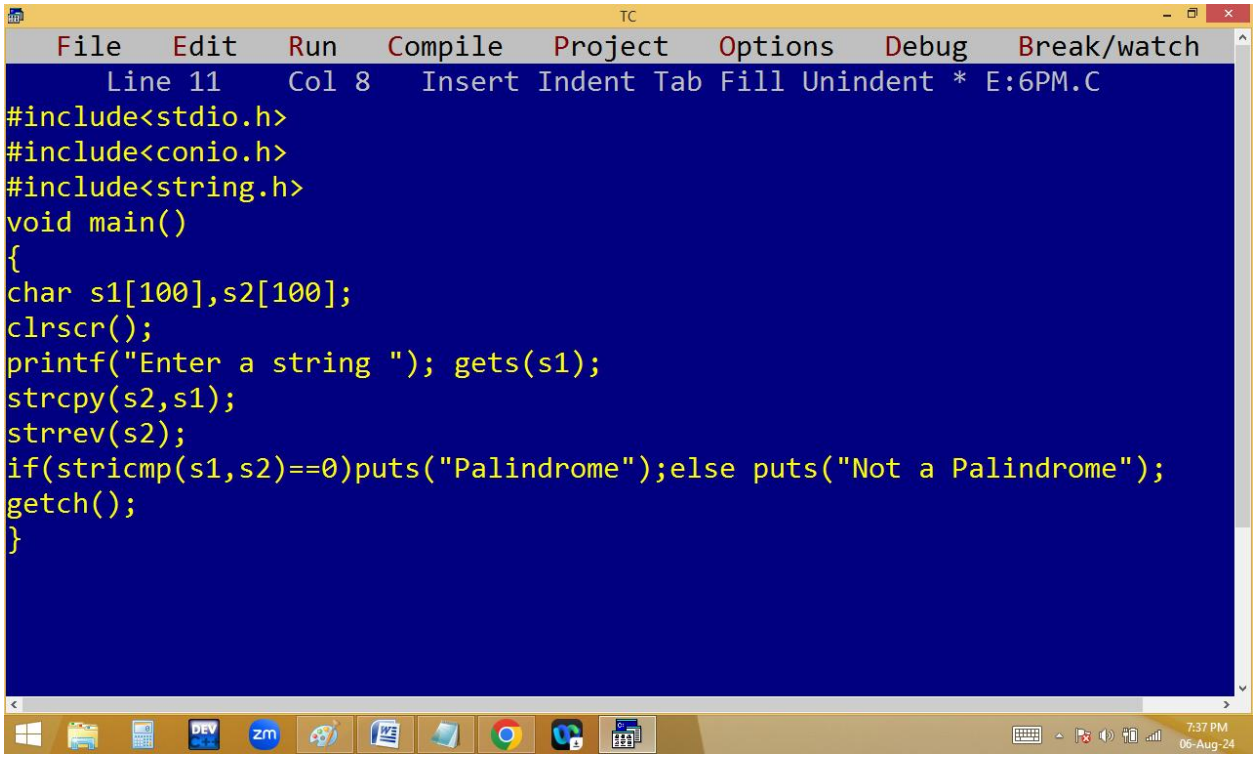
Strstr(main string, sub string);

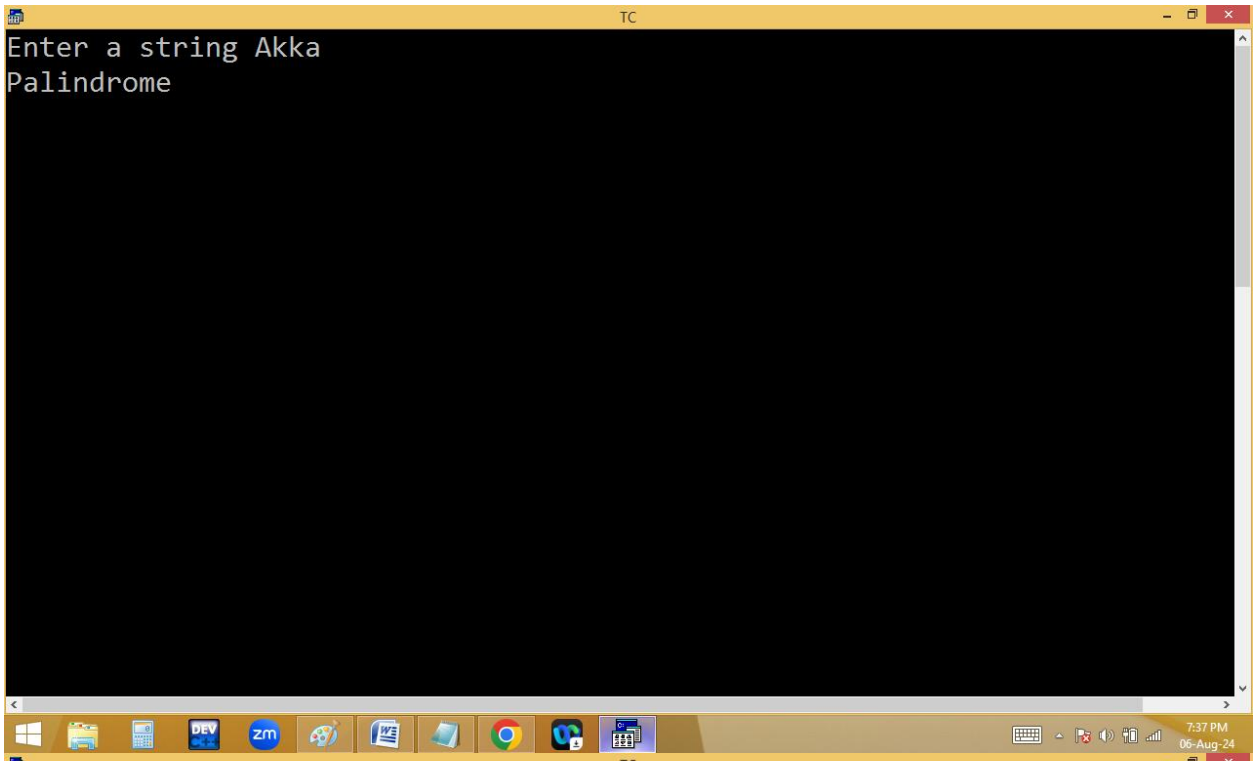

TC
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char s[]="abcdef";
clrscr();
printf("%s address is %u\n",s,s);
printf("c address is %u\n",strstr(s,"c"));
printf("%s\n",strstr(s,"c"));
printf("C address is %u\n",strstr(s,"C"));
printf("%s\n",strstr(s,"C"));
printf("c is %d char in %s", strstr(s,"c")-s+1,s);
getch();
}

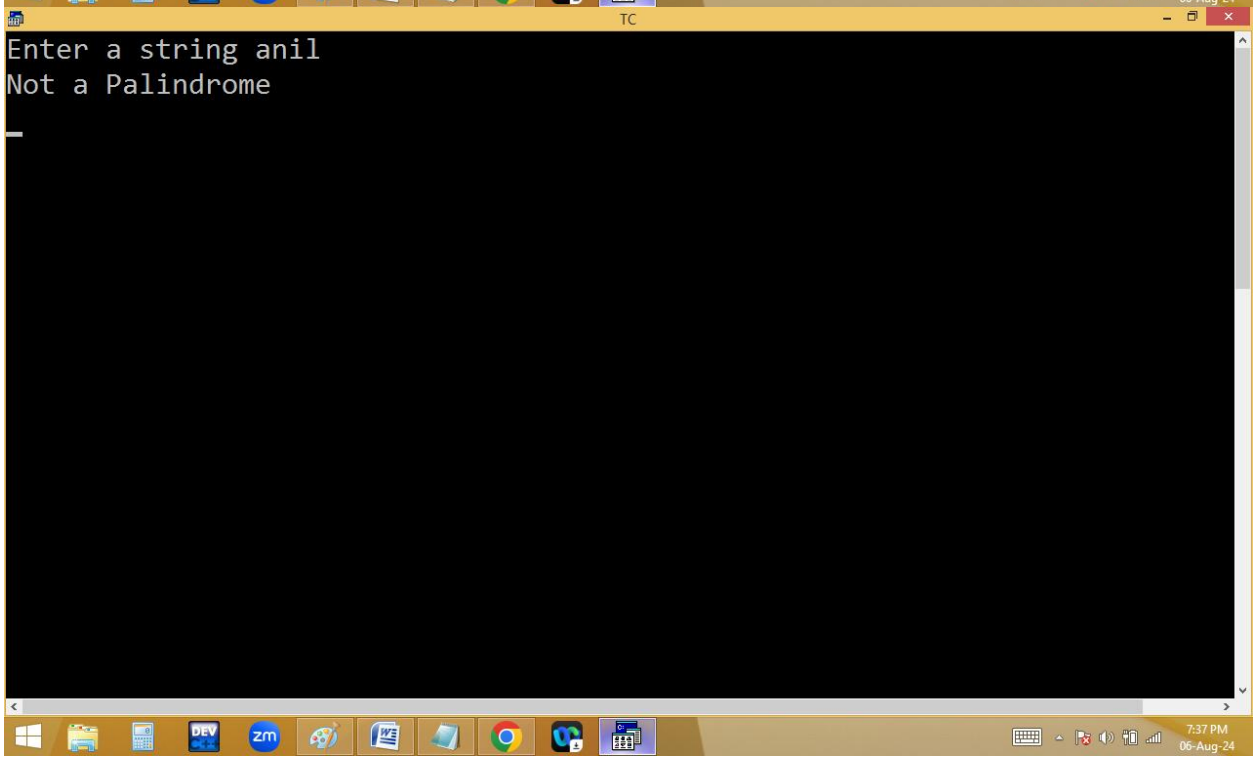

TC
abcdef address is 65496
c address is 65498
cdef
C address is 0
(null)
c is 3 char in abcdef


TC
File Edit Run Compile Project Options Debug Break/watch
Line 3 Col 1 Insert Indent Tab Fill Unindent * E:6PM.C
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char s[5][20],sub[2]; int i;
clrscr();
puts("Enter 5 names "); for(i=0;i<5;i++)gets(s[i]);
printf("Enter the sub string to search "); gets(sub);
puts("NAMES");
puts("--------------------------------");
for(i=0;i<5;i++)if(strstr(s[i],sub)!=0)puts(s[i]);
getch();
}
7:31 PM
06-Aug-24
TC
Enter 5 names
himanshu
bablu
shashank
akshay
prem
Enter the sub string to search sh
NAMES
----
himanshu
shashank
akshay
7:31 PM
06-Aug-24

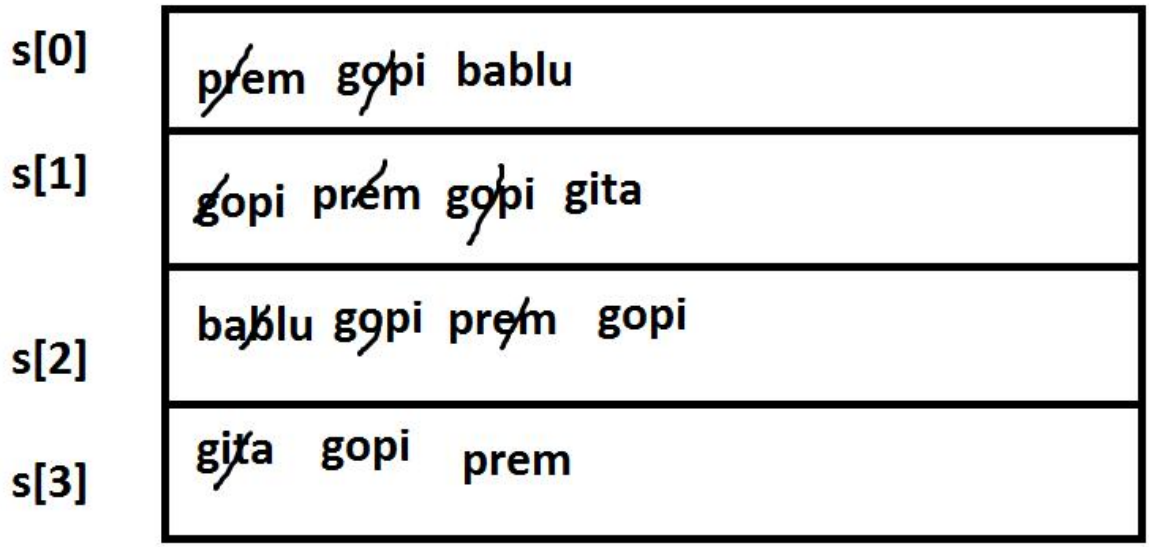
Finding palindrome using string library functions:




TC
Enter a string Akka
Palindrome
7:37 PM
06-Aug-24

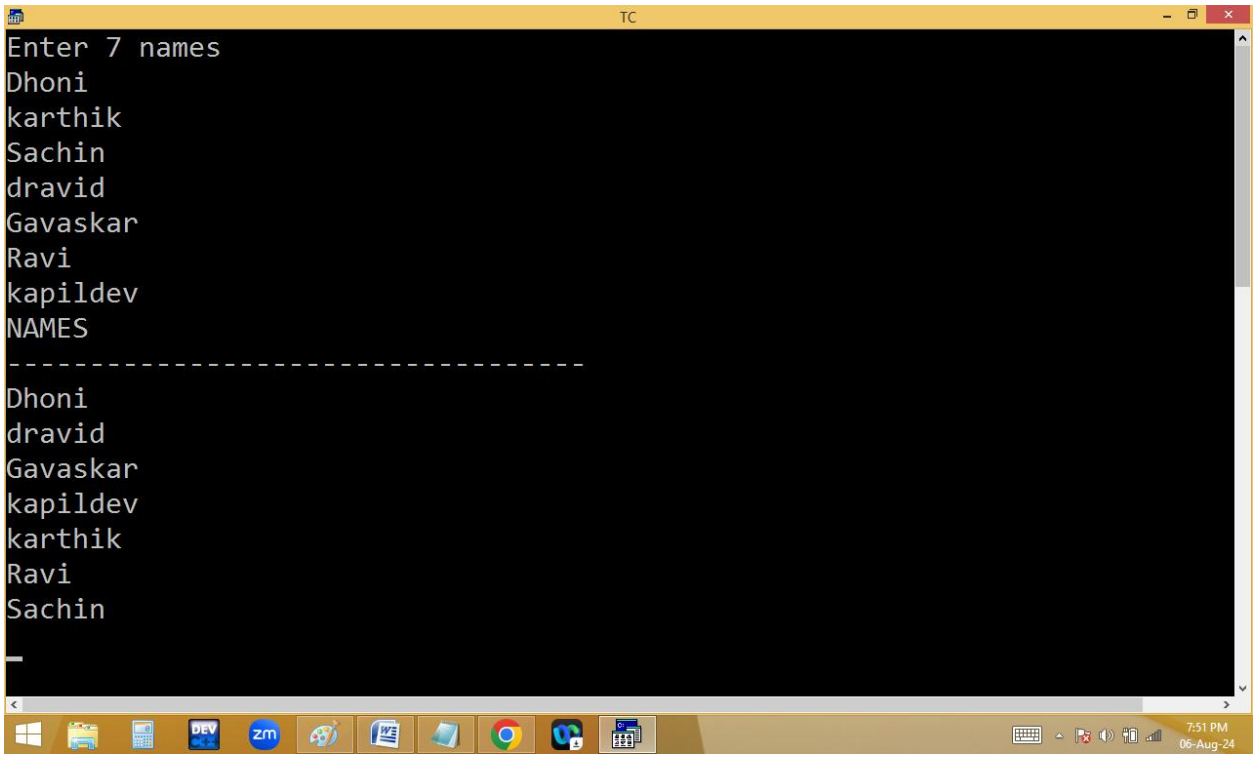

TC
Enter a string anil
Not a Palindrome
7:37 PM
06-Aug-24

Sorting of strings:




```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char s[7][100],t[100]; int i,j;
clrscr();
printf("Enter 7 names\n"); for(i=0;i<7;i++)gets(s[i]);
for(i=0;i<=5;i++)
```

```
{
for(j=i+1;j<=6;j++)
{
if(stricmp(s[i],s[j])>0){strcpy(t,s[i]);strcpy(s[i],s[j]);strcpy(s[j],t);}
}
}
puts("NAMES");
puts("---------------------------------");
for(i=0;i<7;i++)puts(s[i]);
getch();
}
```


TC
Enter 7 names
Dhoni
karthik
Sachin
dravid
Gavaskar
Ravi
kapildev
NAMES
Dhoni
dravid
Gavaskar
kapildev
karthik
Ravi
Sachin
7:51 PM
06-Aug-24