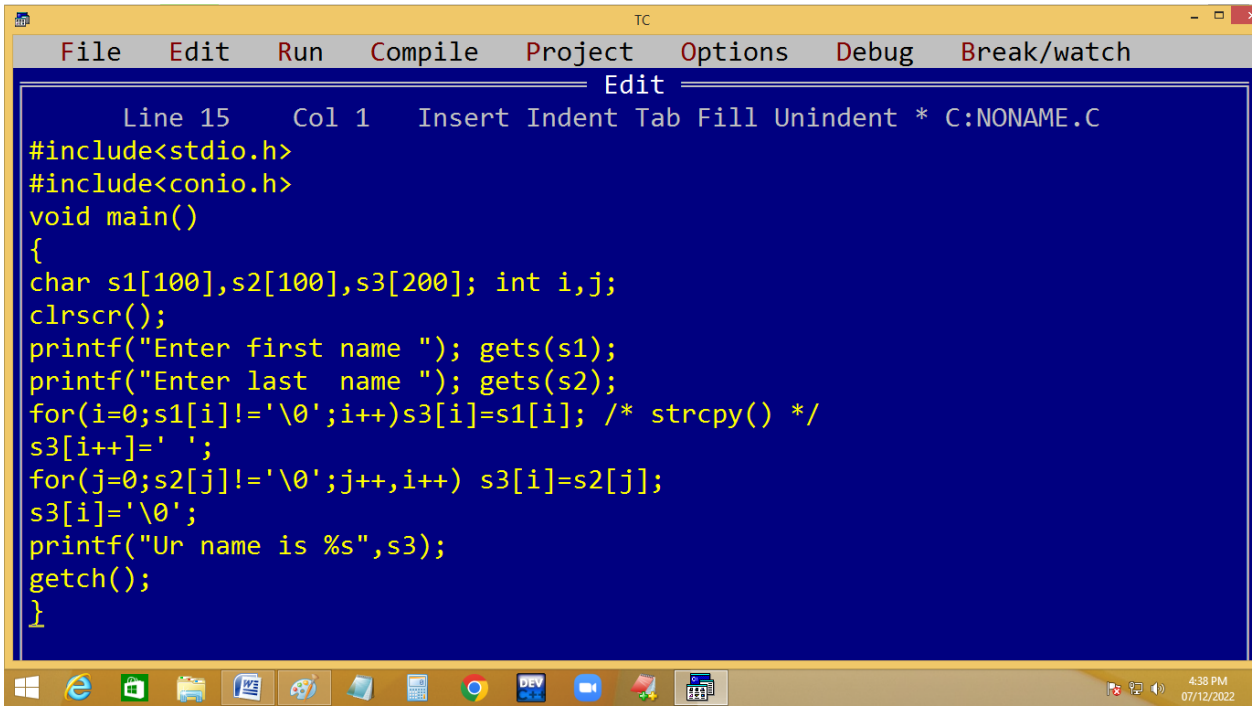
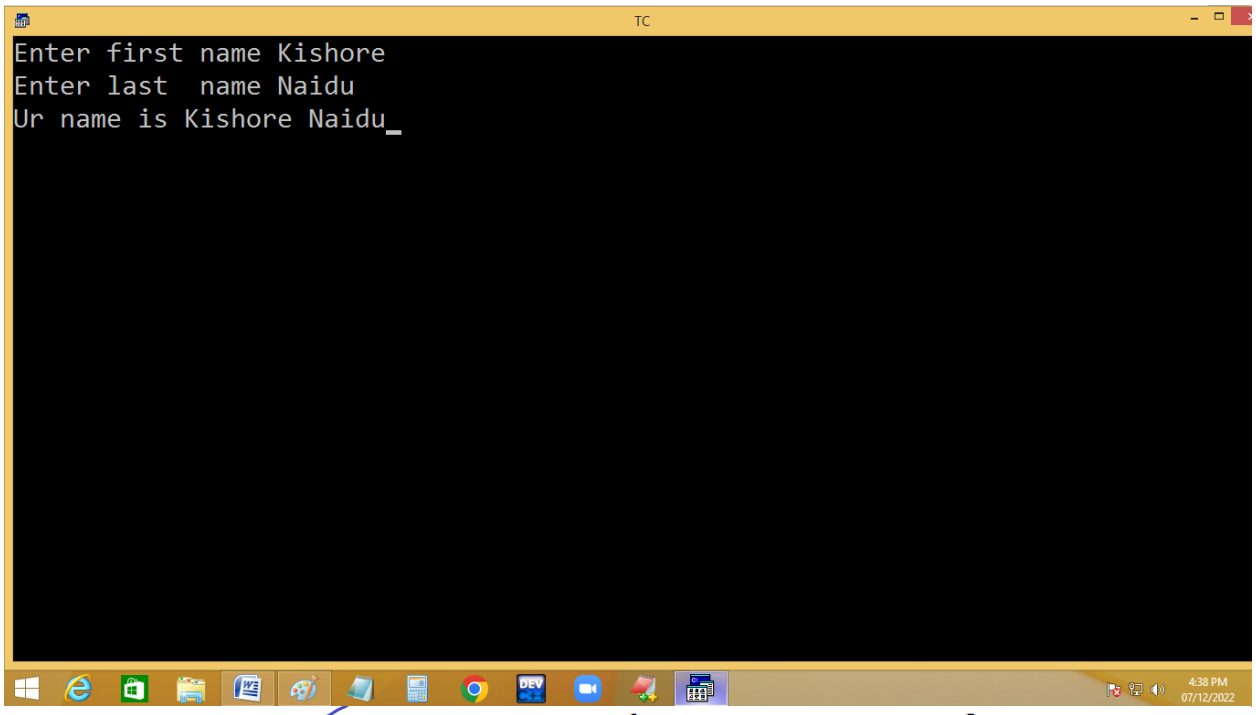
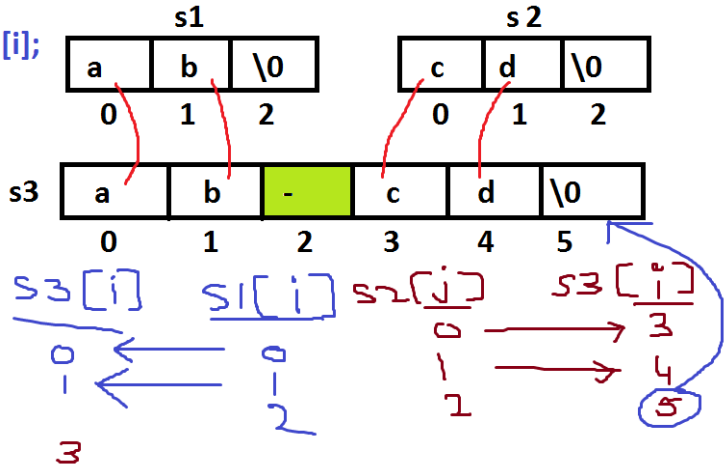
String concatenation [adding of two strings]:



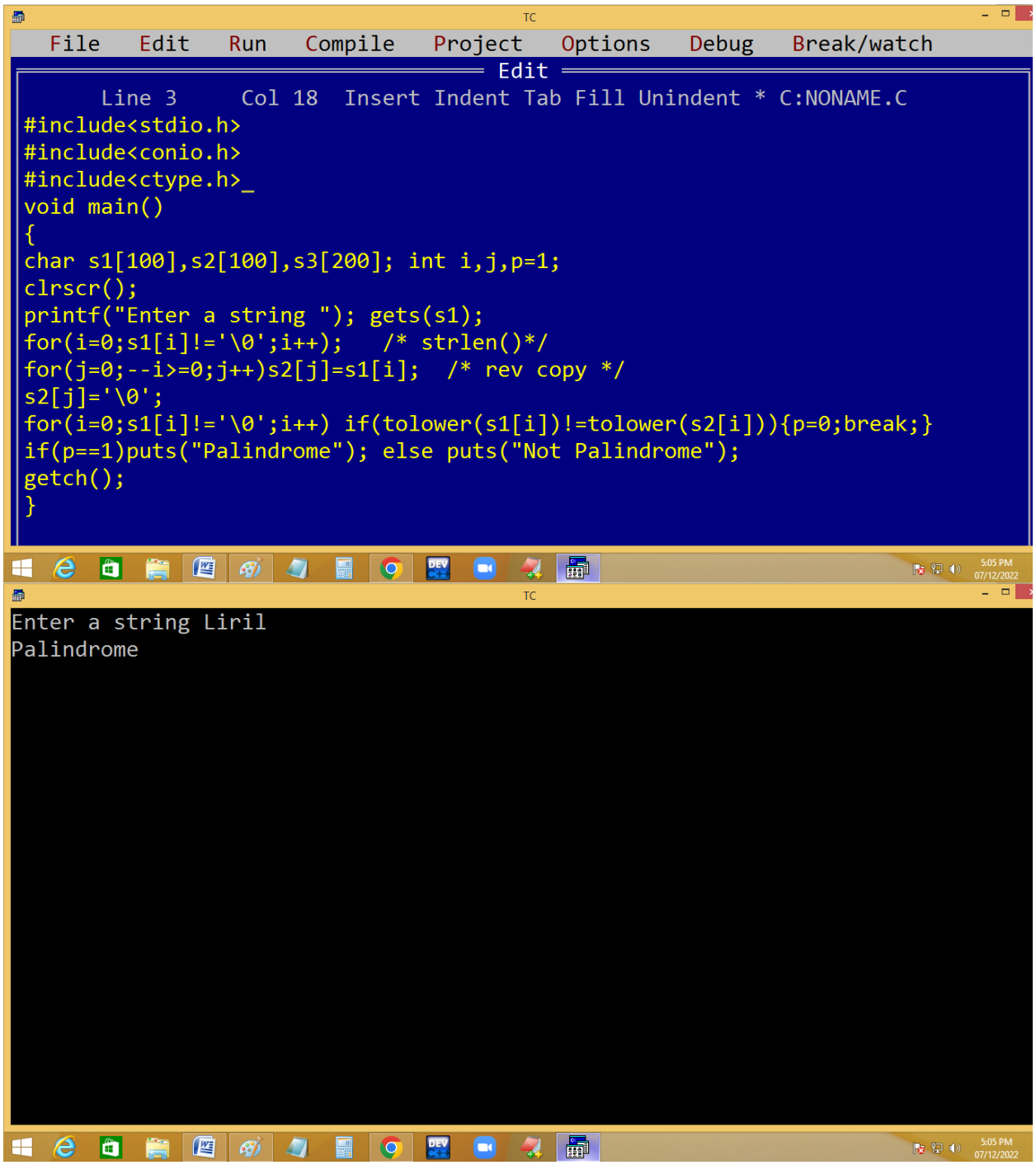



```
for(i=0; s1[i]!='\0';i++)s3[i]=s1[i];
s3[i++]=' ';  strcpy
for(j=0;s2[j]!='\0';j++,i++)
s3[i]=s2[j];  strcat
s3[i]='\0';
p(s3);
```

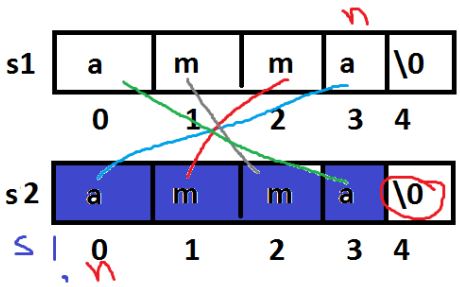


Eg. finding palindrome

Eg. liril, madam, Malayalam,……


TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 3 Col 18 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
char s1[100],s2[100],s3[200]; int i,j,p=1;
clrscr();
printf("Enter a string "); gets(s1);
for(i=0;s1[i]!='\0';i++); /* strlen()*/
for(j=0;--i>=0;j++)s2[j]=s1[i]; /* rev copy */
s2[j]='\0';
for(i=0;s1[i]!='\0';i++) if(tolower(s1[i])!=tolower(s2[i])){p=0;break;}
if(p==1)puts("Palindrome"); else puts("Not Palindrome");
getch();
}
5:05 PM
07/12/2022
TC
Enter a string Liril
Palindrome
5:05 PM
07/12/2022

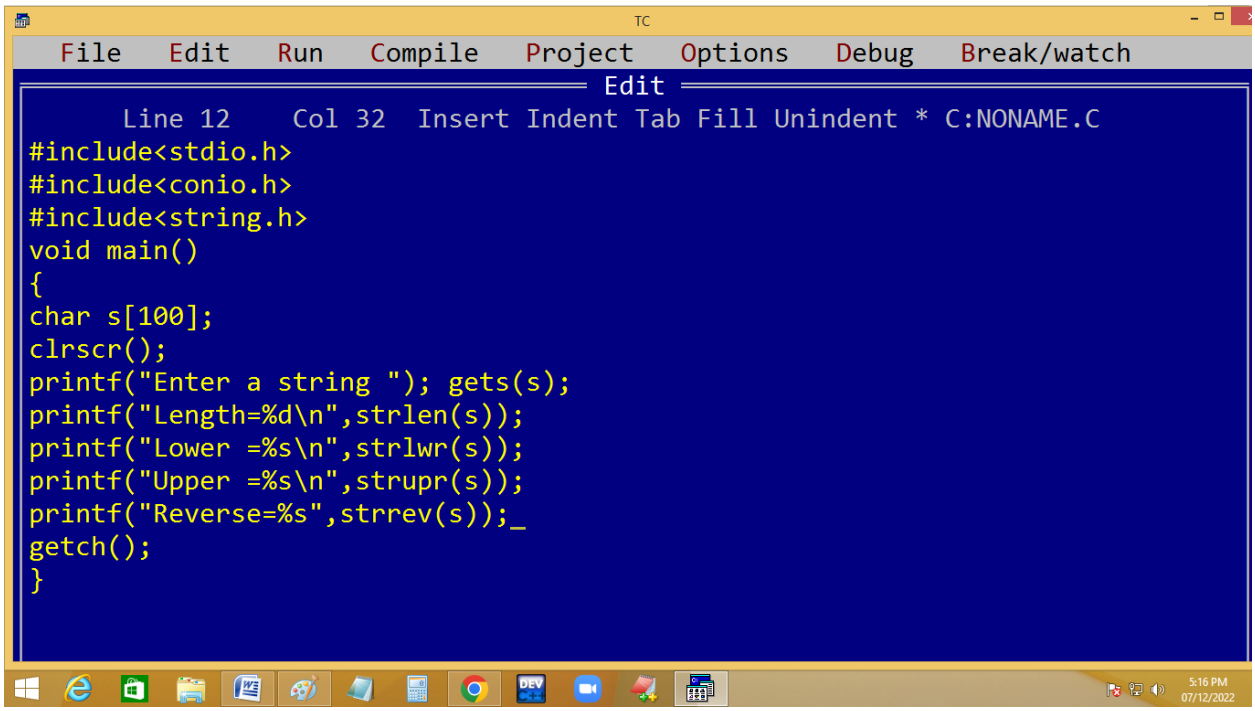
```
for(i=0; s1[i]!='\0';i++) ;     /* strlen*/

for( j=0; --i>=0; j++) s2[ j]=s1[i]; /* rev copy */

for(i=0; s1[i]!='\0';i++)
{                          /* strcmp() */
if(s1[i]!=s2[i]){p=0; break;}
}

if(p==1)p(palin);
else p(not);
```

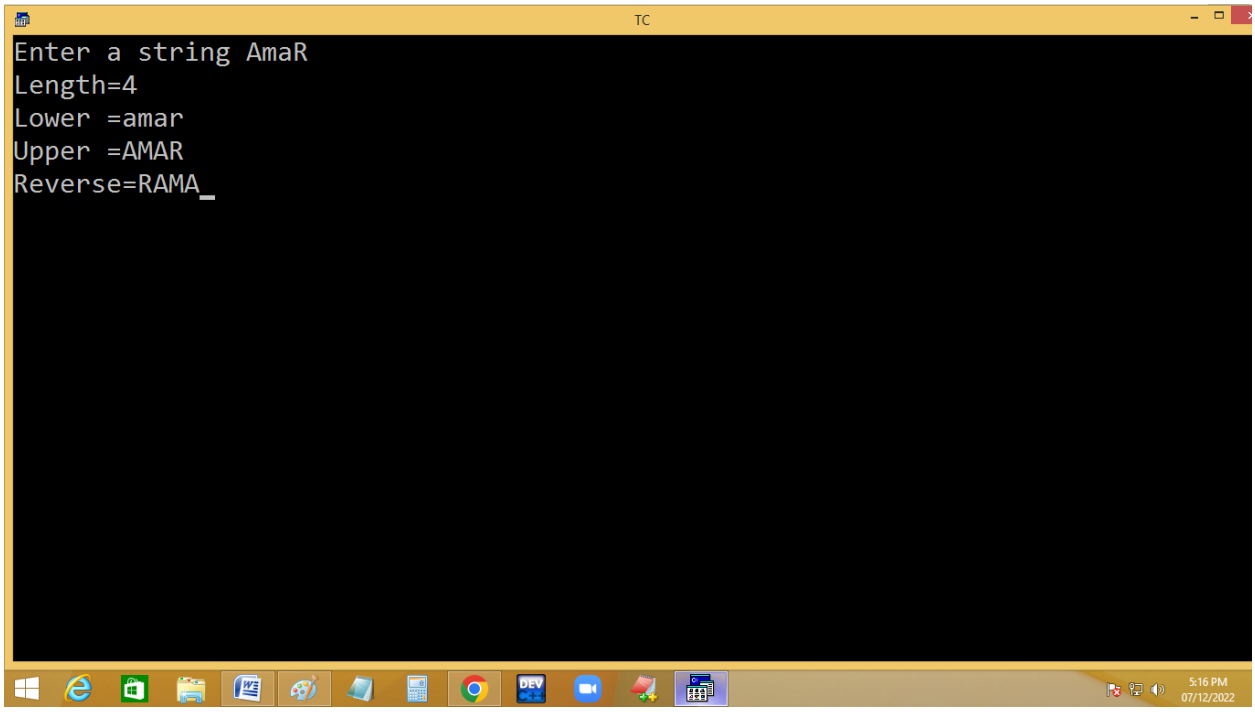


String library functions:

To manage string operations c provides some library functions available in string.h. They are

1. **strlen(): It return string length.**
   Syntax: int strlen(string);
2. **strrev()**: It return reverse string.
   Syntax: char * strrev(string);
3. **strlwr()**: It converts string into lower case.
   Syntax: char * strlwr(string);
4. **strupr()**: It converts string into lower case.
   Syntax: char * strlwr(string);



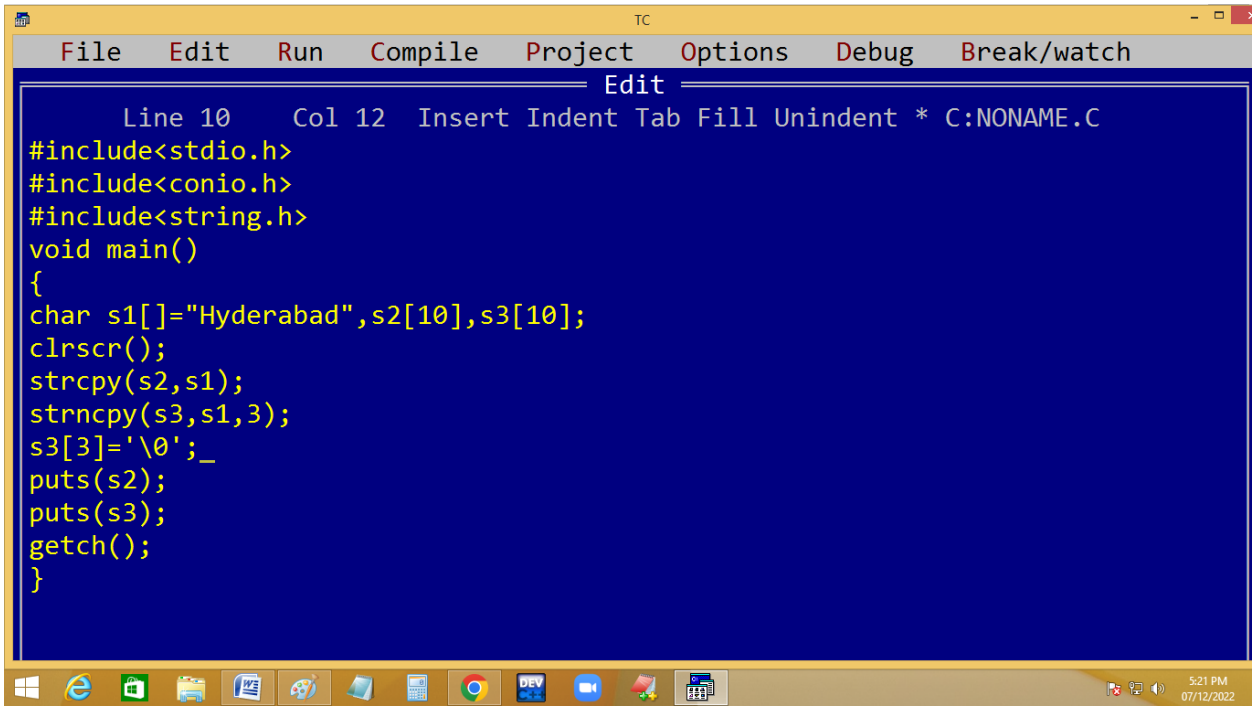


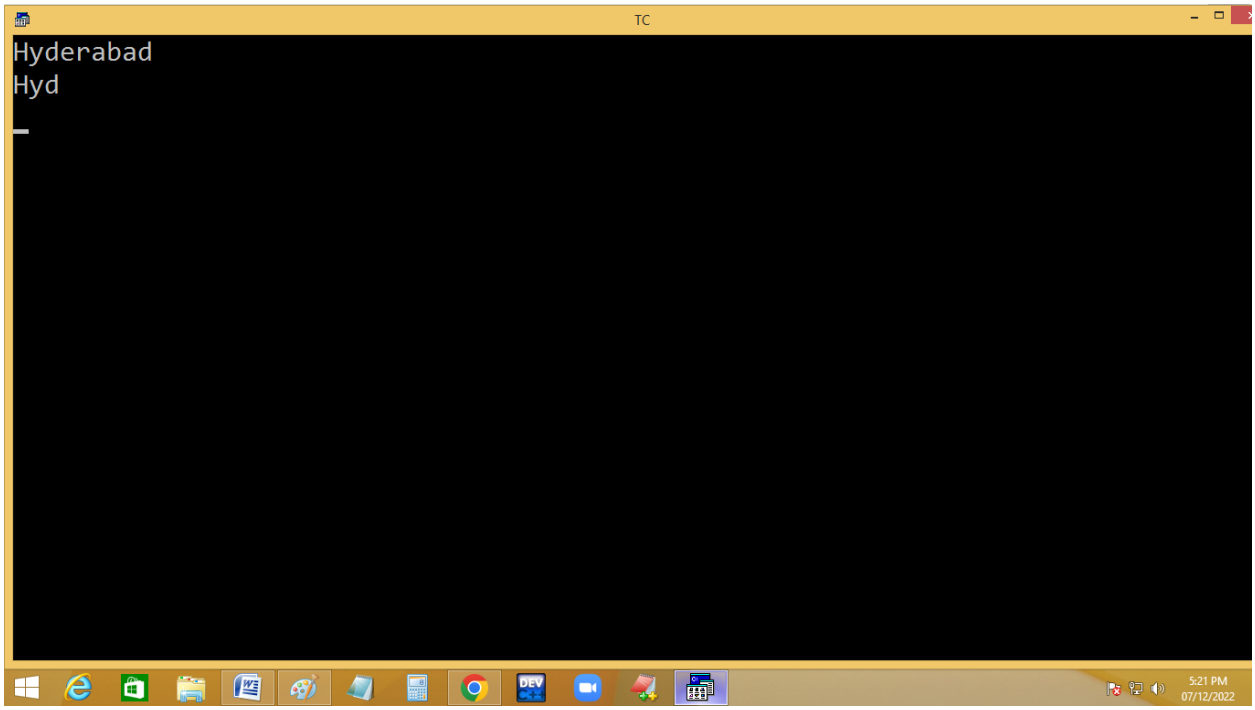
5. strcpy(): it copies source string into destination string.

Syntax: char * strcpy(destination string, source string);

6. strncpy(): it copies specified no of char into destination string.

Syntax: char * strncpy(dest string, source str, no of char);



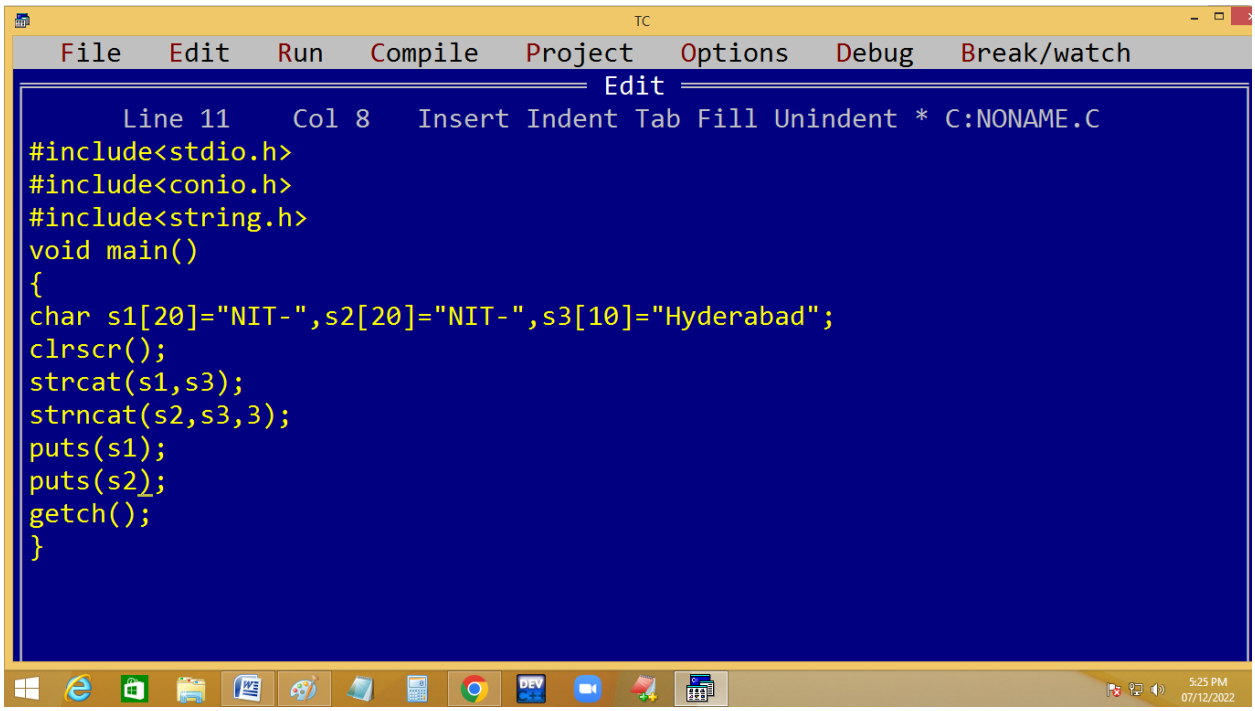


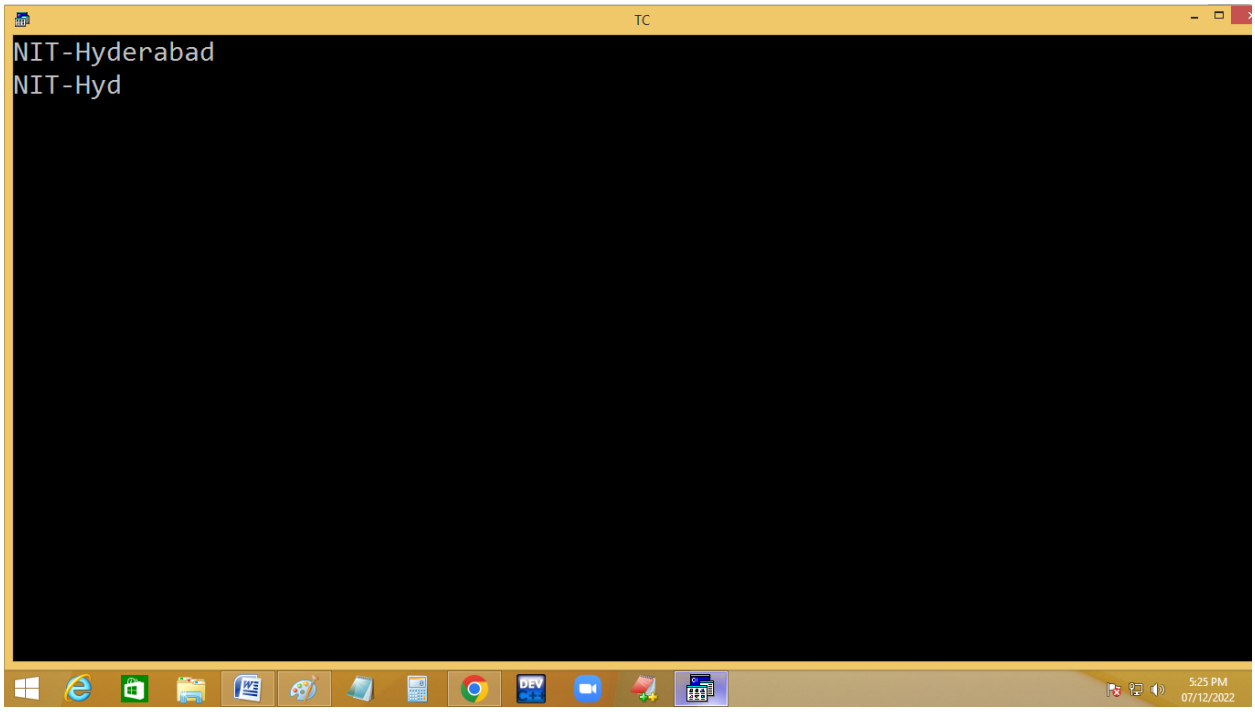
7. **strcat(): It adds string2 to string1.**

   Syntax: char * strcat(string1, string2);

8. **strncat(): It adds specified no of char to string2.**

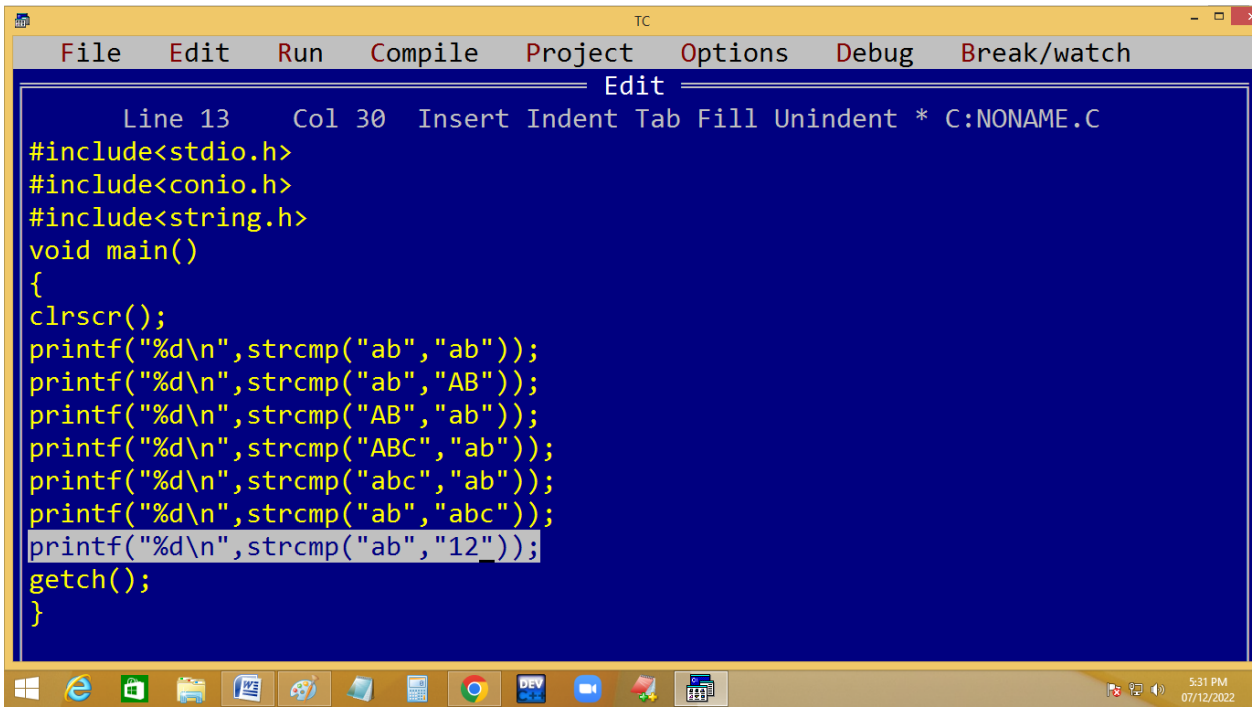
   Syntax: char * strncat(string1, string2, no of char);

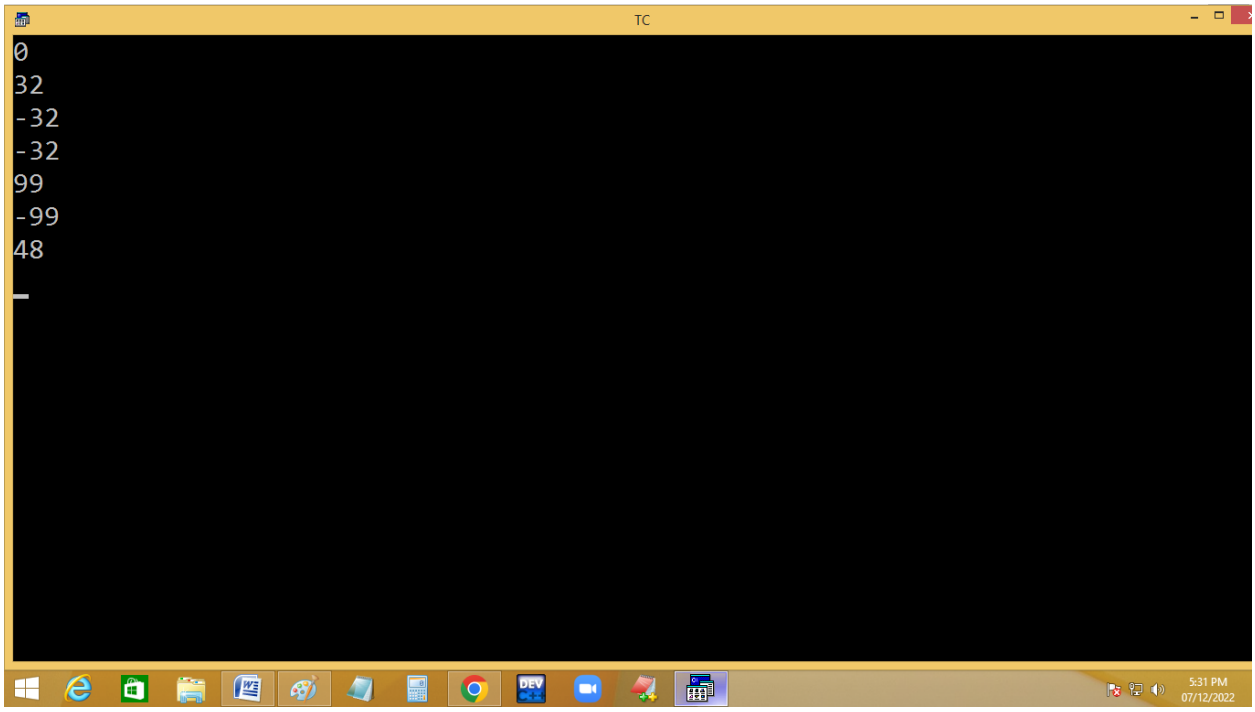




9. **strcmp():** It compare two string until finding the first ascii difference. It returns the difference in int format.

   Syntax: int strcmp(string1, string2);

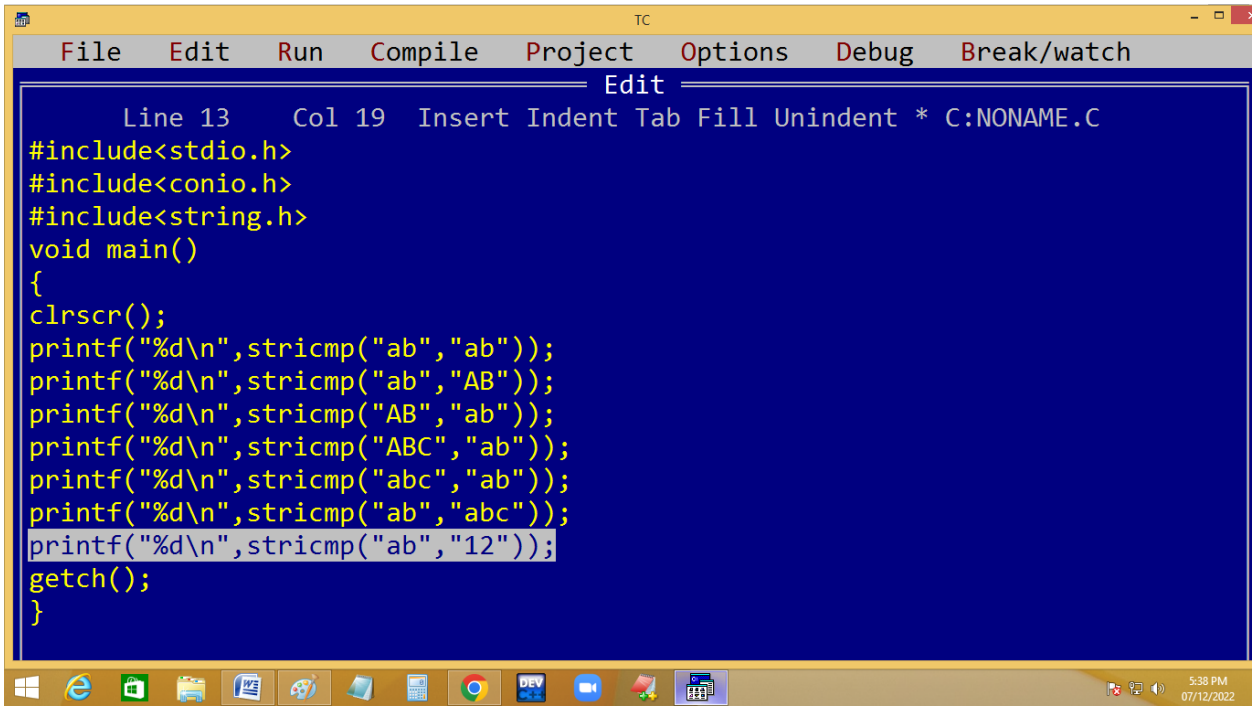


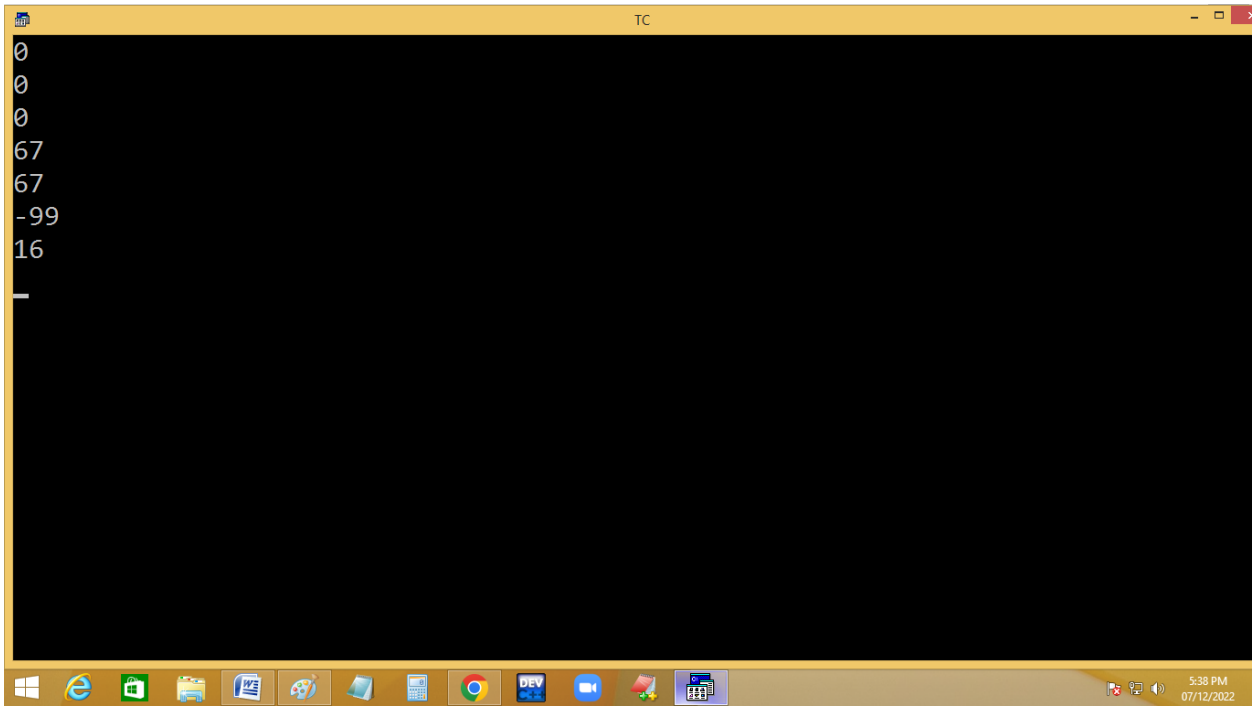


10. **stricmp()**: It compare two strings by ignoring case. i.e. lower and upper are same. When matching char or

different data type found in 2nd string, the first string char taken in upper case.

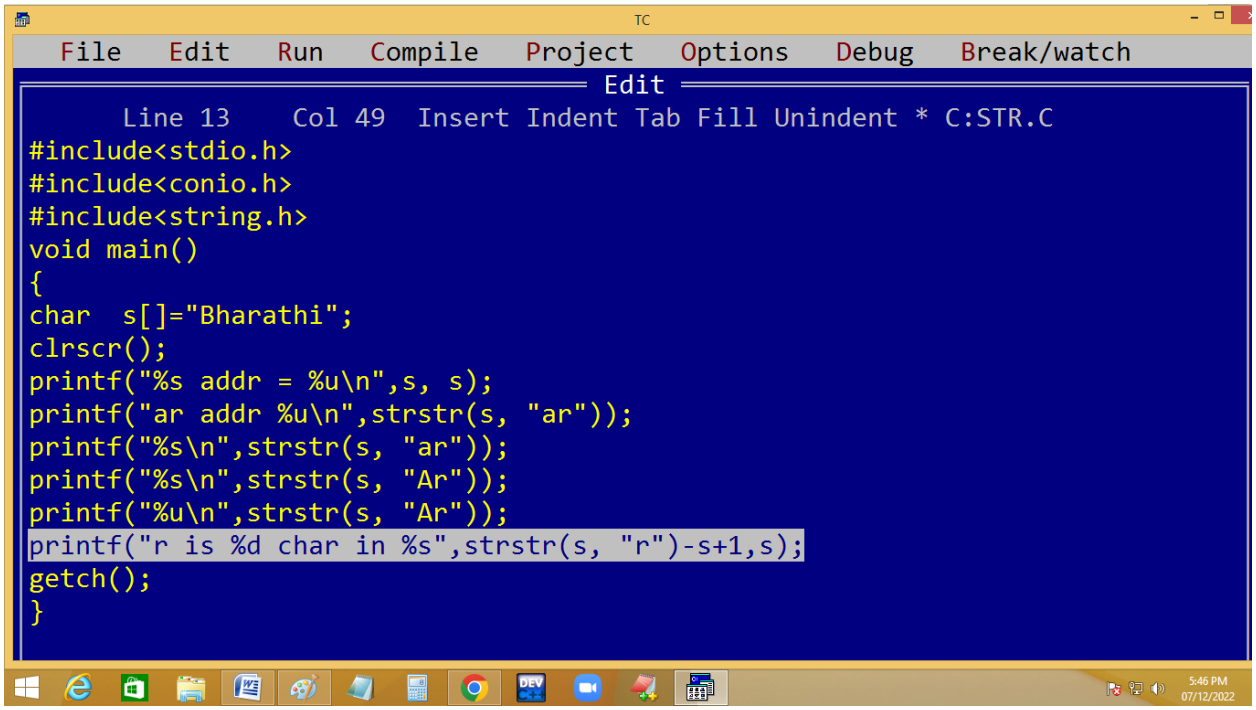
Syntax: int stricmp(string1, string2);

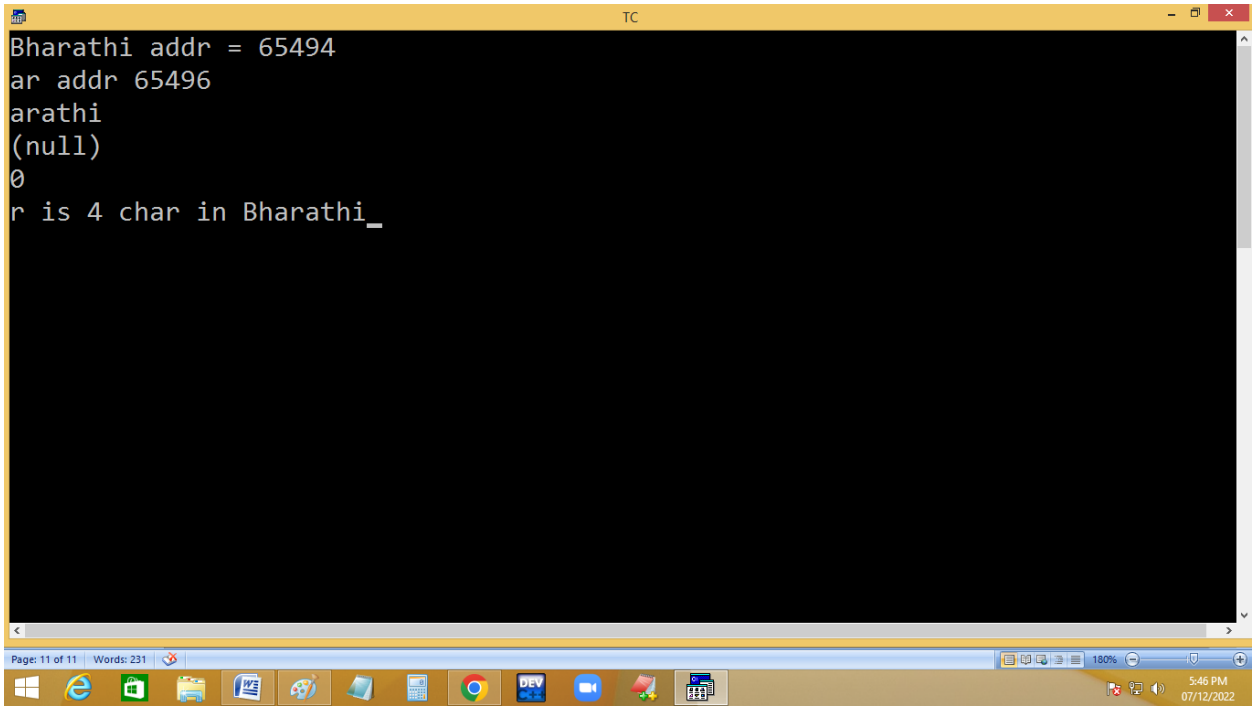




11. **strstr()**: It returns the address of substring in main string. If sub string not found it return 0 or (null).

Syntax: char * strstr(main string, sub string);





Eg. Finding palindrome using library function.