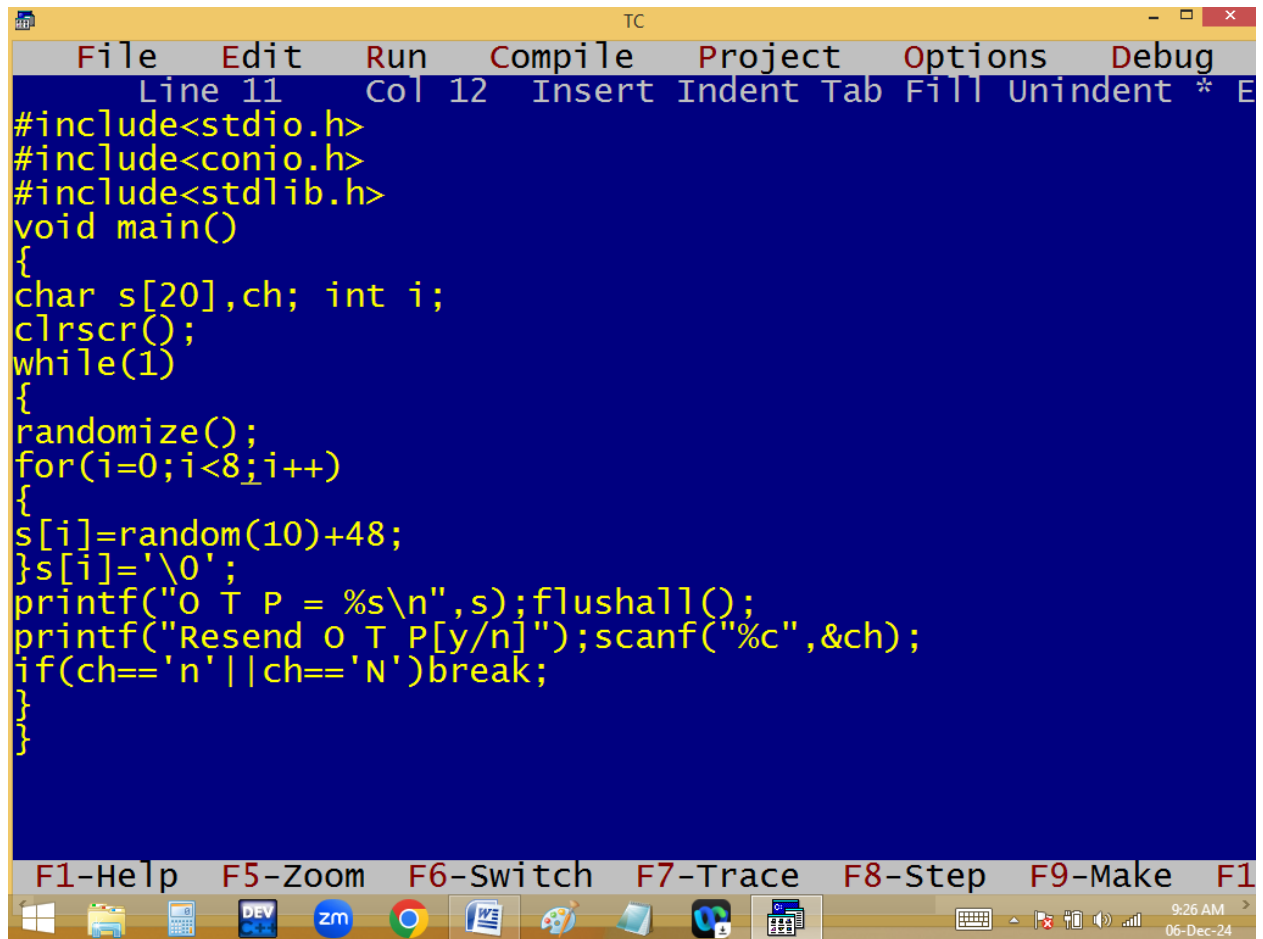


O T P Generation:



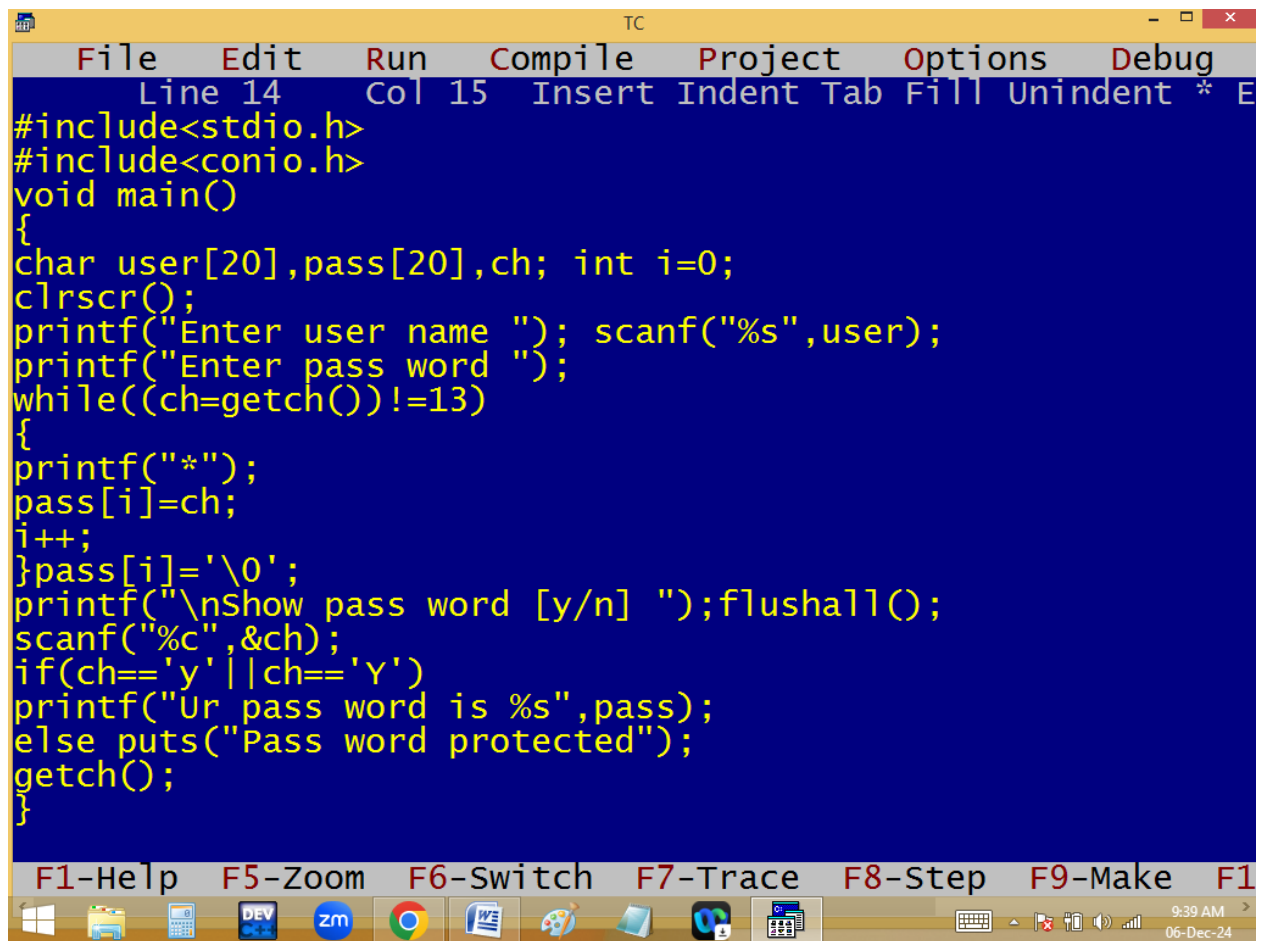
The image shows a screenshot of a Turbo C++ (TC) IDE window. The window has a yellow title bar with the text "TC" and standard window controls. Below the title bar is a menu bar with the following options: File, Edit, Run, Compile, Project, Options, and Debug. Under the "Run" menu, there is a submenu with options: Line 11, Col 12, Insert, Indent, Tab, Fill, Unindent, and *. The main editing area has a dark blue background with yellow text. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
void main()
{
char s[20],ch; int i;
clrscr();
while(1)
{
randomize();
for(i=0;i<8;i++)
{
s[i]=random(10)+48;
}s[i]='\0';
printf("O T P = %s\n",s);flushall();
printf("Resend O T P[y/n]");scanf("%c",&ch);
if(ch=='n' || ch=='N')break;
}
}
```

At the bottom of the window, there is a status bar with function key shortcuts: F1-Help, F5-Zoom, F6-Switch, F7-Trace, F8-Step, F9-Make, and F10-Run. Below the status bar is a Windows taskbar with various icons including the Start button, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and a folder icon. The system clock in the bottom right corner shows the time as 9:26 AM and the date as 06-Dec-24.

```
TC
O T P = 48617758
Resend O T P[y/n]y
O T P = 08624487
Resend O T P[y/n]y
O T P = 91444745
Resend O T P[y/n]n
```

Pass word creation:

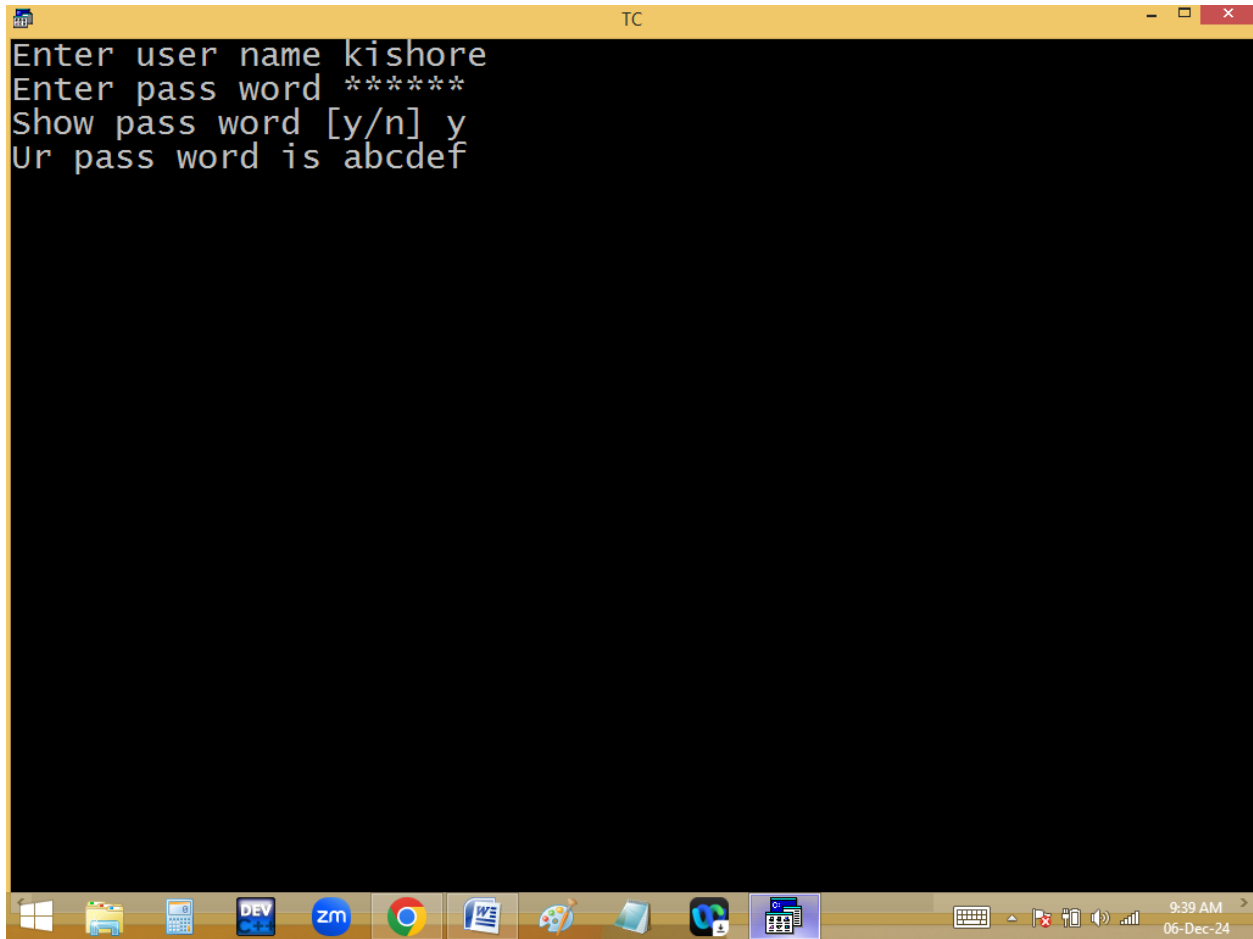


The image shows a screenshot of a Turbo C++ (TC) IDE window. The title bar at the top reads "TC". The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", and "Debug". Below the menu bar, a status bar indicates "Line 14 Col 15" and provides shortcuts: "Insert", "Indent", "Tab", "Fill", "Unindent", and a help icon. The main editing area has a dark blue background with yellow text. The code is a C program for password protection. It includes `<stdio.h>` and `<conio.h>`. The `main` function declares arrays for `user` and `pass`, and a character `ch`. It prompts the user for a name and password, then enters a loop where it masks the password with asterisks. After the password is entered, it prompts the user to show the password (y/n). If 'y' or 'Y' is entered, it prints the password; otherwise, it prints "Pass word protected". The bottom of the window shows a Windows taskbar with various application icons and a system clock indicating 9:39 AM on 06-Dec-24.

```
File Edit Run Compile Project Options Debug
Line 14 Col 15 Insert Indent Tab Fill Unindent * E
#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();
}
```

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Run

9:39 AM 06-Dec-24



```
TC
Enter user name Krish
Enter pass word *****
Show pass word [y/n] n
Pass word protected
```

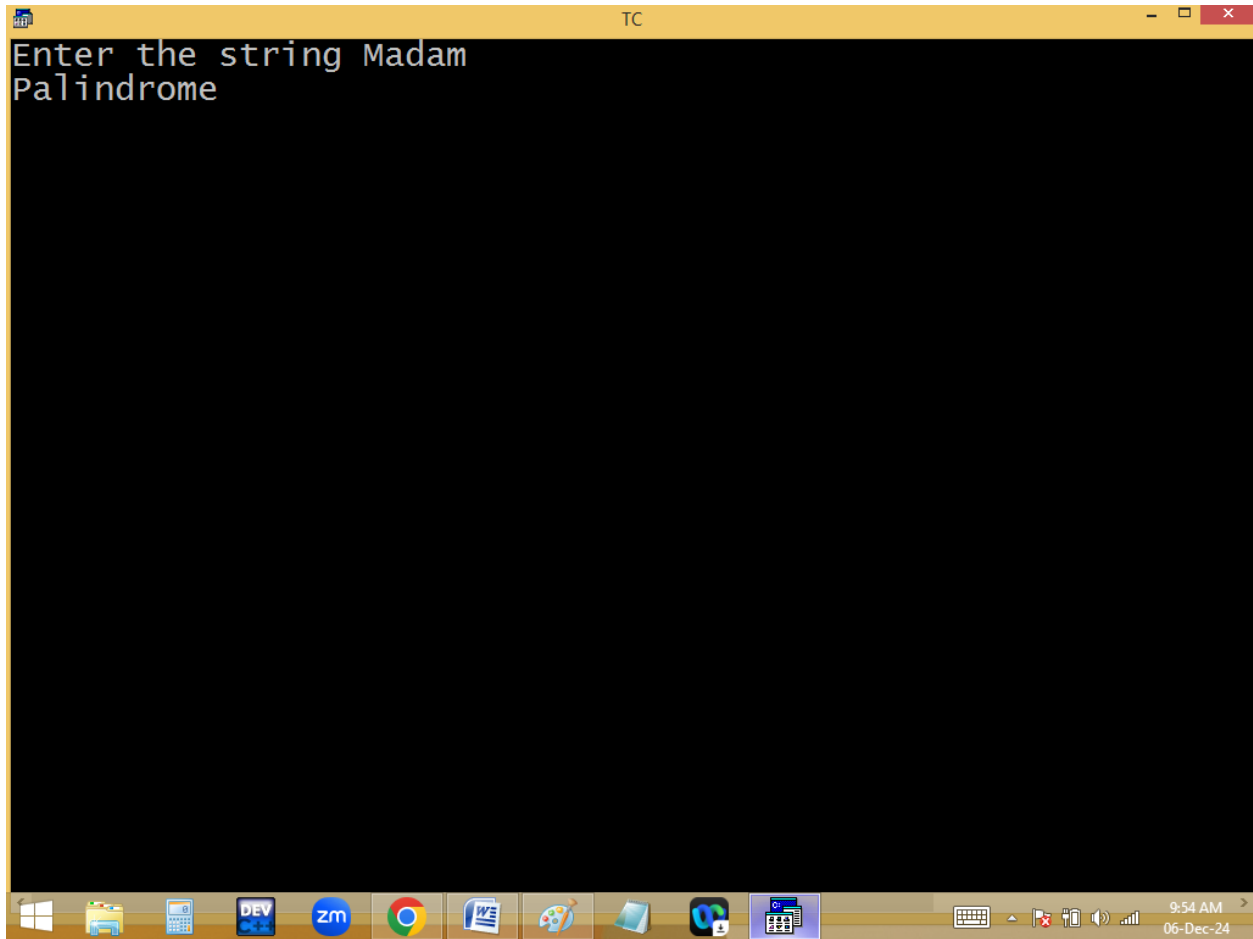
Finding palindrome string or not using single string?

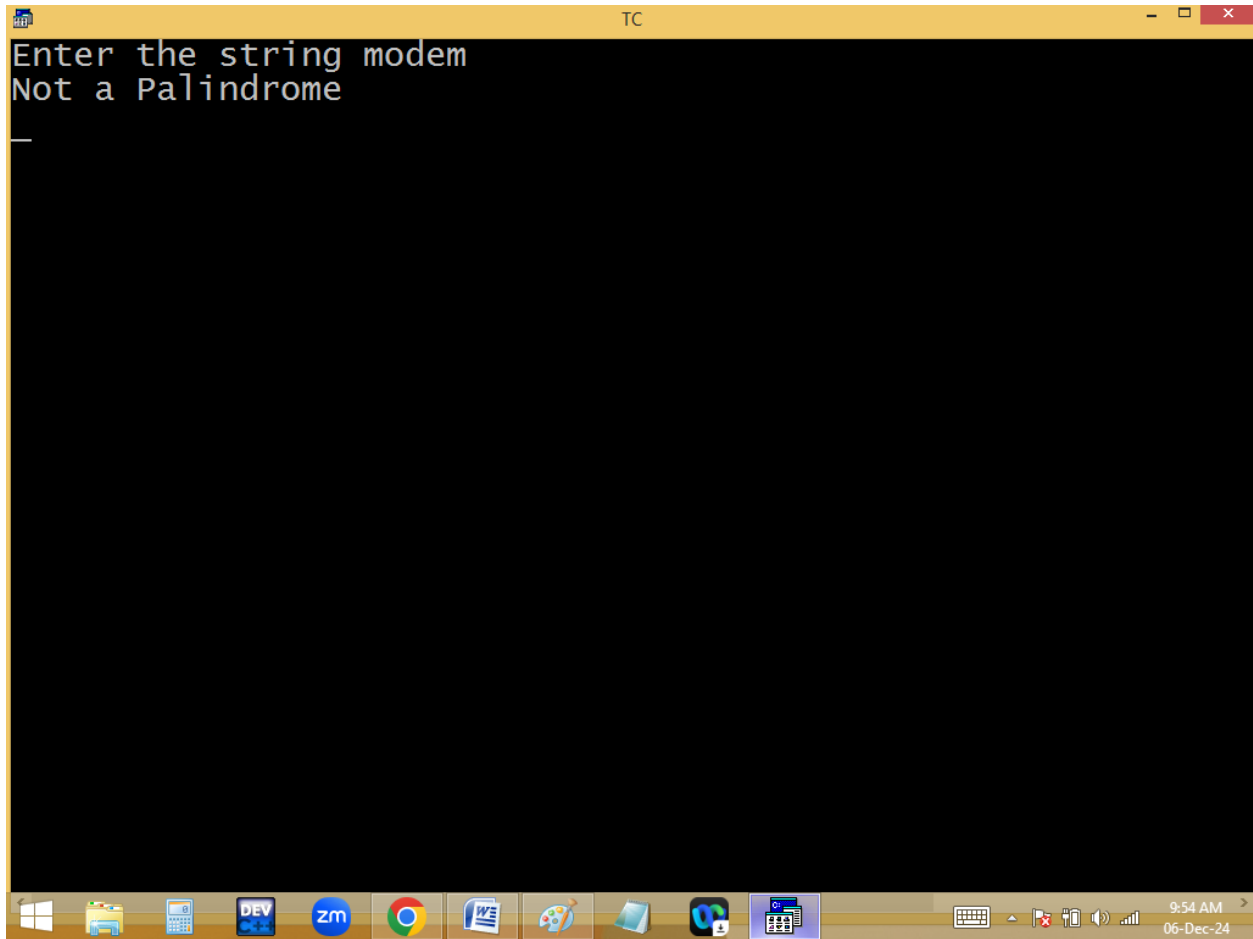
liril, madam, malayalam, ..

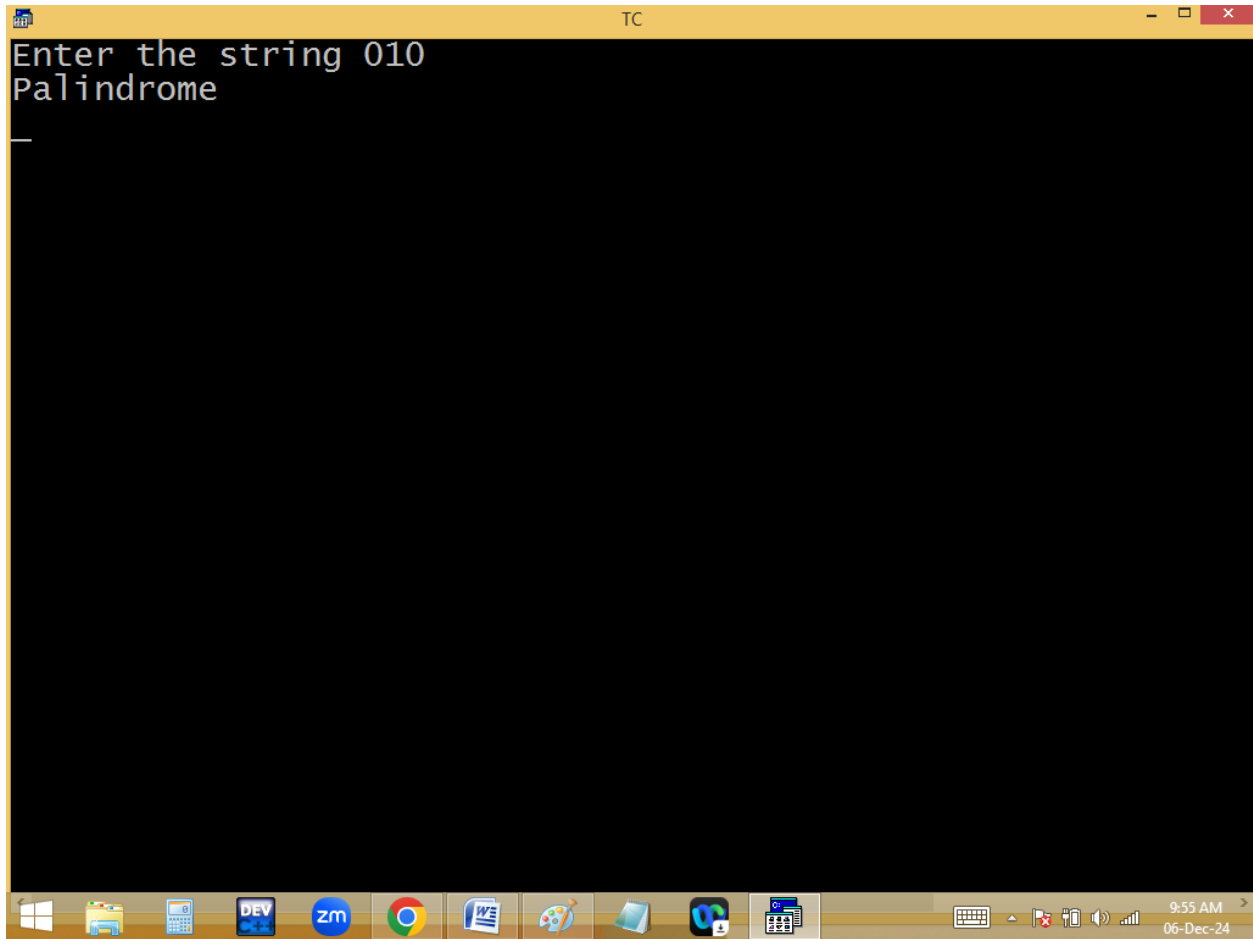
```
TC
File Edit Run Compile Project Options Debug
Line 3 Col 18 Insert Indent Tab Fill Unindent * E
#include<stdio.h>
#include<conio.h>
#include<ctype.h>_
void main()
{
char s[100]; int i,j;
clrscr();
printf("Enter the string "); scanf("%s",s);
for(i=0;s[i]!='\0';i++); /* strlen */
for( j=0; j<i/2;j++ )
{
if(tolower(s[j]) != tolower(s[i-j-1]) )
{puts("Not a Palindrome");getch();return;}
}
puts("Palindrome");
getch();
}
```

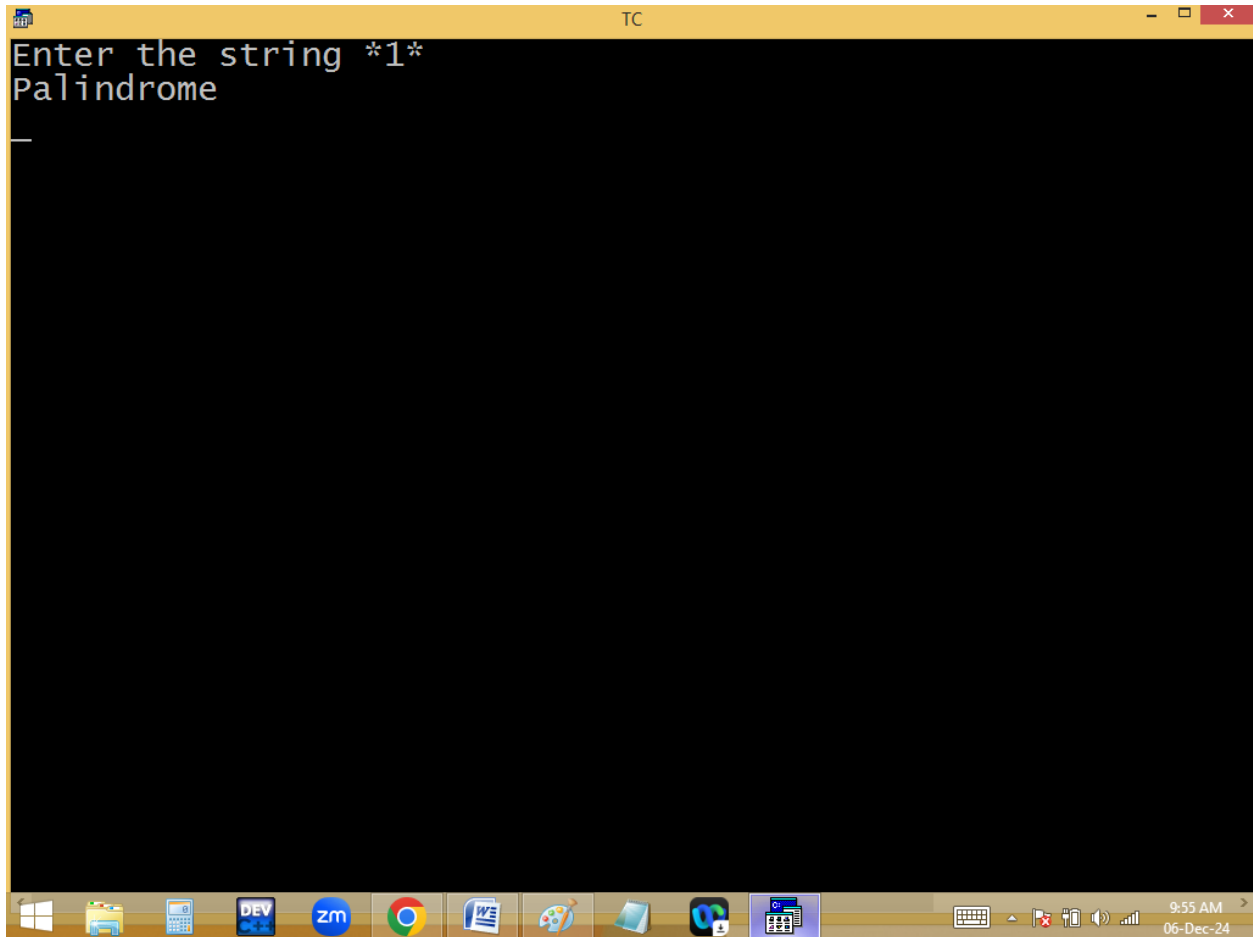
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Run

9:54 AM 06-Dec-24



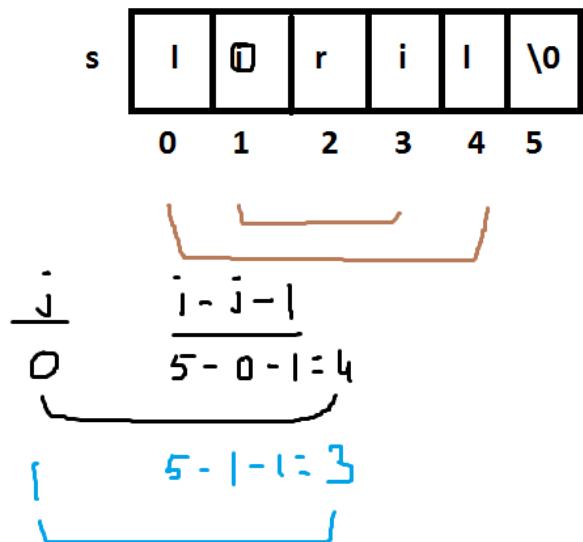






for(i=0; s[i]!='\0';i++) ; len=5<==i

```
for( j=0;j<i/2;j++)
{
  if( a[j] != a[i-j-1] ) {puts("Not");return;}
}
puts("Palindrome");
```

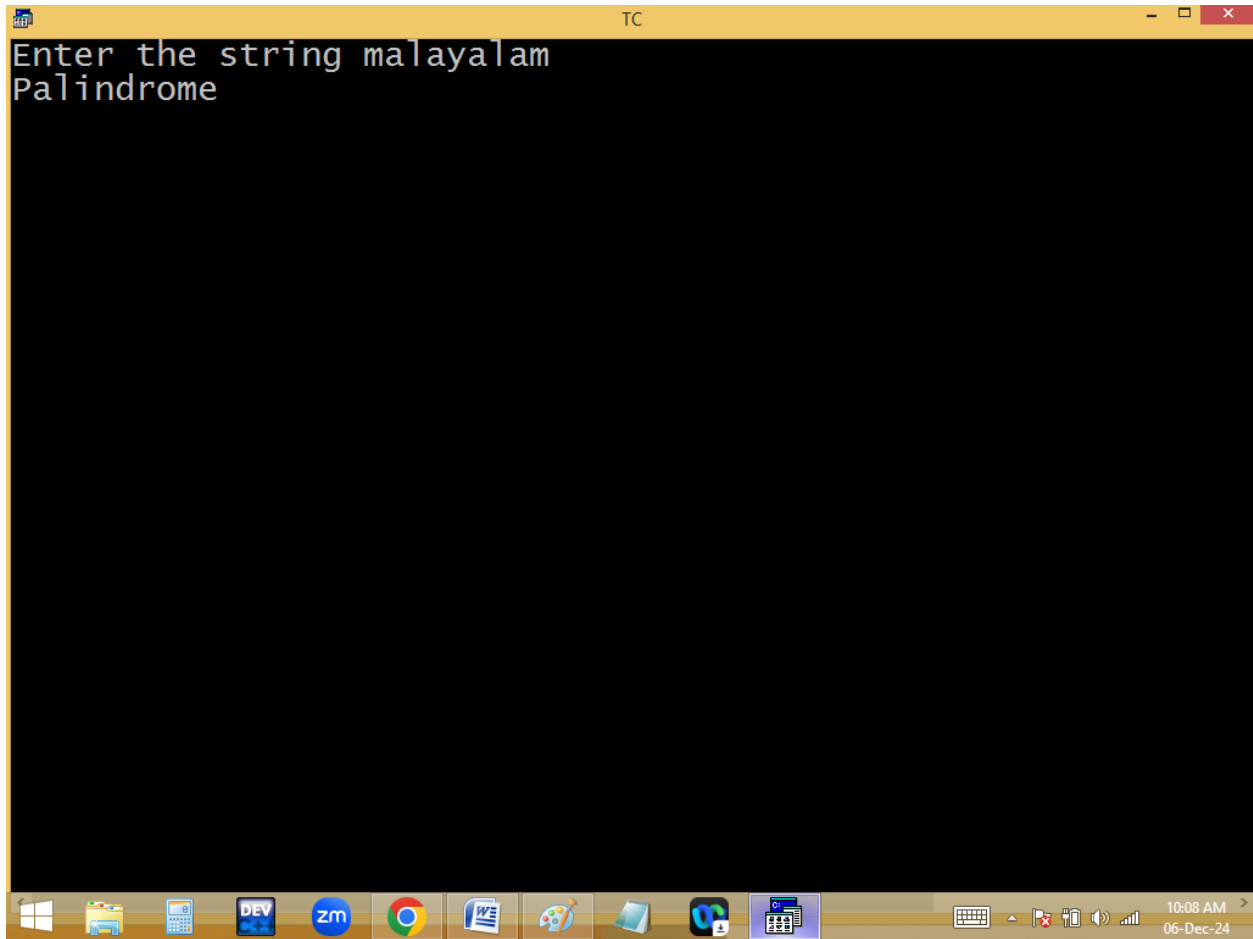


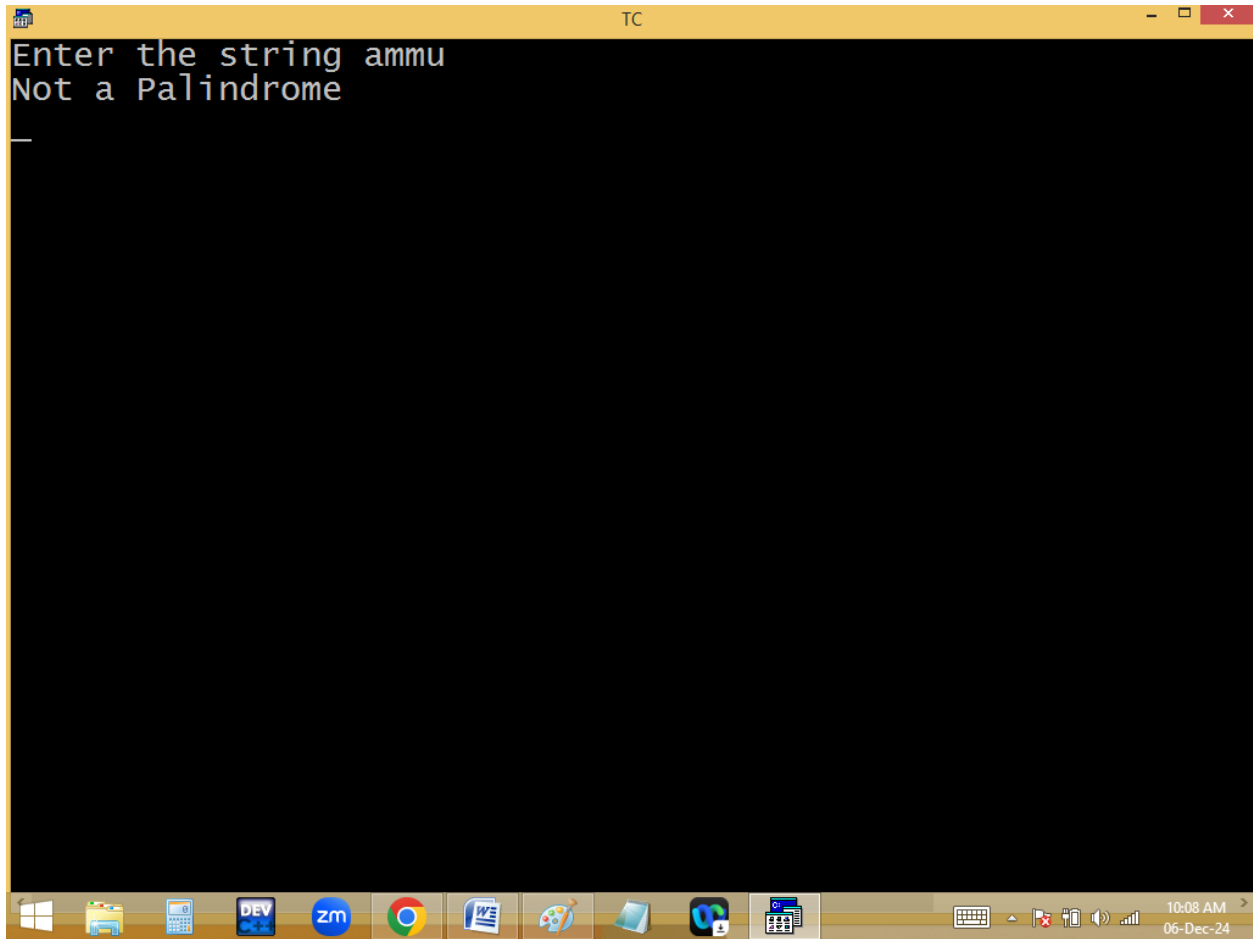
Using 2 strings:

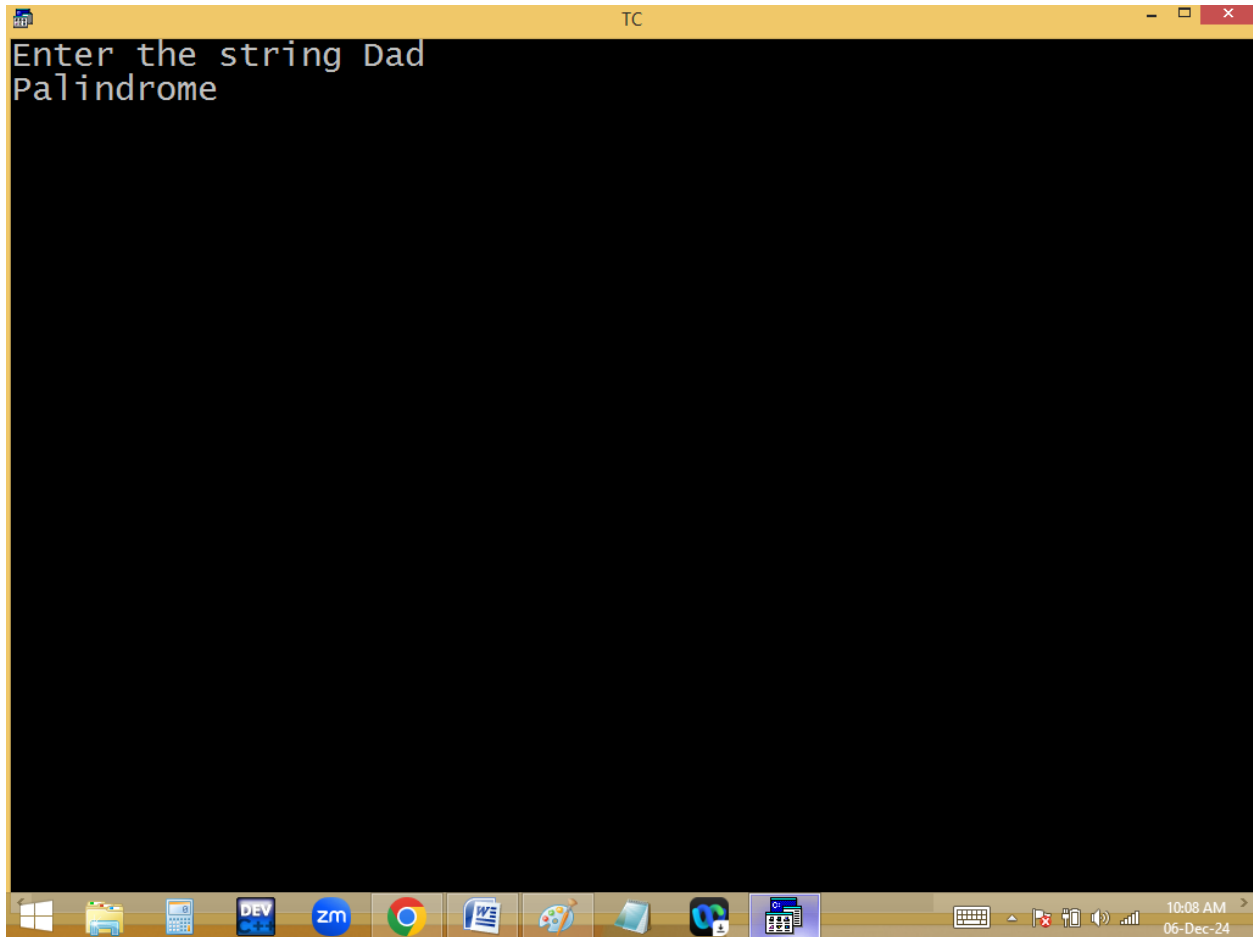
```
TC
File Edit Run Compile Project Options Debug
Line 8 Col 43 Insert Indent Tab Fill Unindent * E
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
char s1[100],s2[100]; int i,j;
clrscr();
printf("Enter the string "); scanf("%s",s1);
for(i=0;s1[i]!='\0';i++); /* strlen */
for( s2[i--]='\0',j=0; i>=0;i--,j++ )
{
s2[j]=s1[i];/*str rev+copy*/
}
for(i=0;s1[i]!='\0';i++)
{
if(tolower(s1[i]) != tolower(s2[i]) )
{puts("Not a Palindrome");getch();return;}
}
puts("Palindrome");
getch();
}
```

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Run

10:08 AM 06-Dec-24







```
for( i=0; s1[ i]!='\0';i++); len=5<=i strlen
```

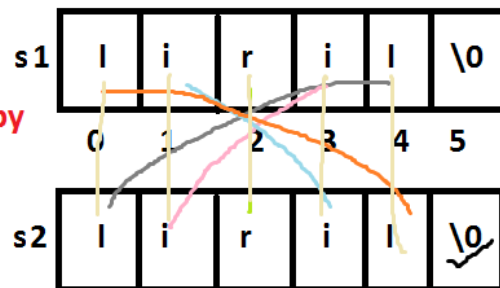
```
for( s2[i--]='\0', j=0;i>=0;i--,j++)s2[j]=s1[i];
```

```
for( i=0; s1[i]!='\0';i++)
{   strcmp
  if(s1[i]!=s2[i])p(Not);return;
}
p(palindrome);
```

str rev+copy

$s1[\underline{i}]$ $s2[\underline{j}]$

5
4 → 0
3 → 1
2 → 2
1 → 3
0 → 4



String concatenation:

Enter first name: kishore

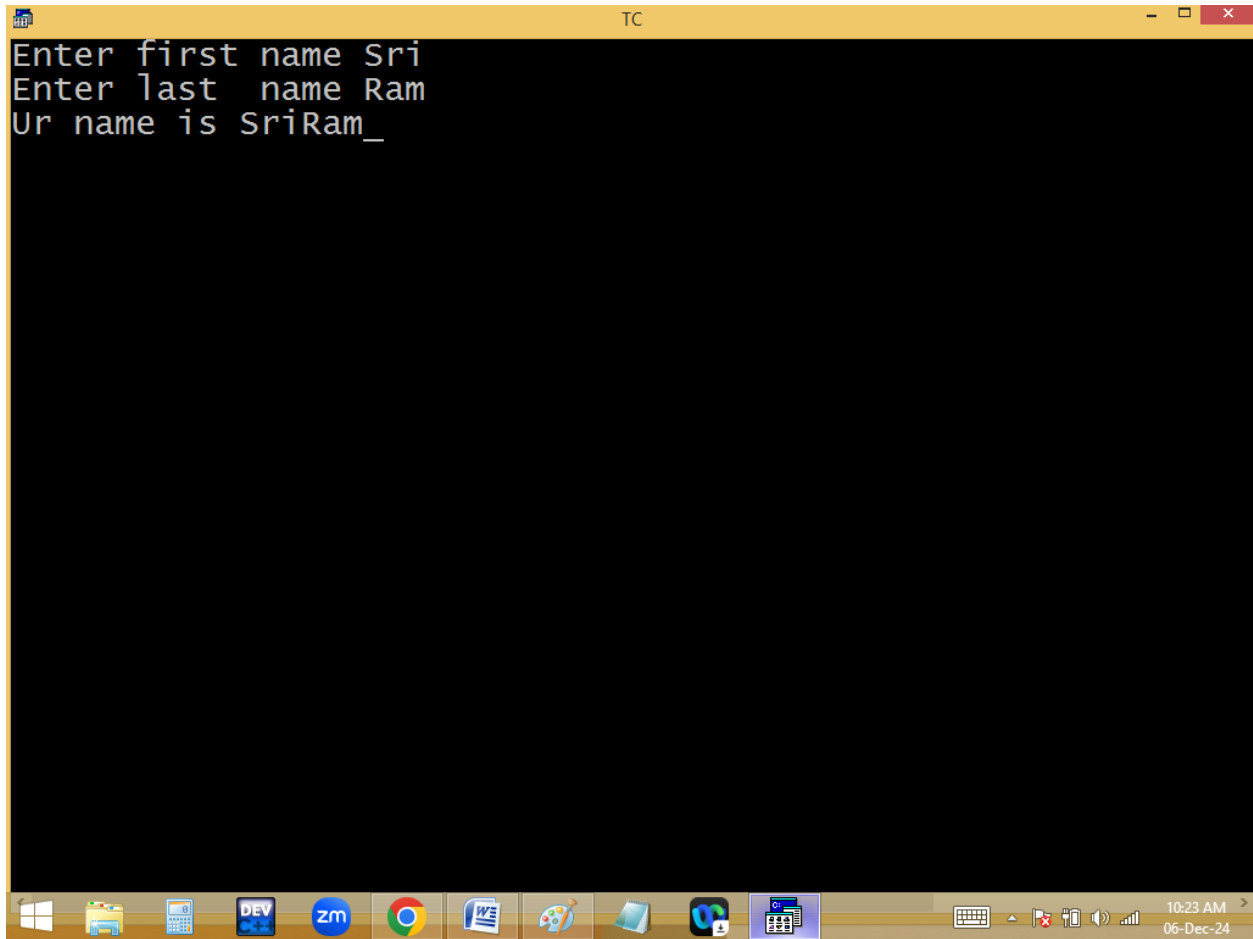
Enter last name: naidu

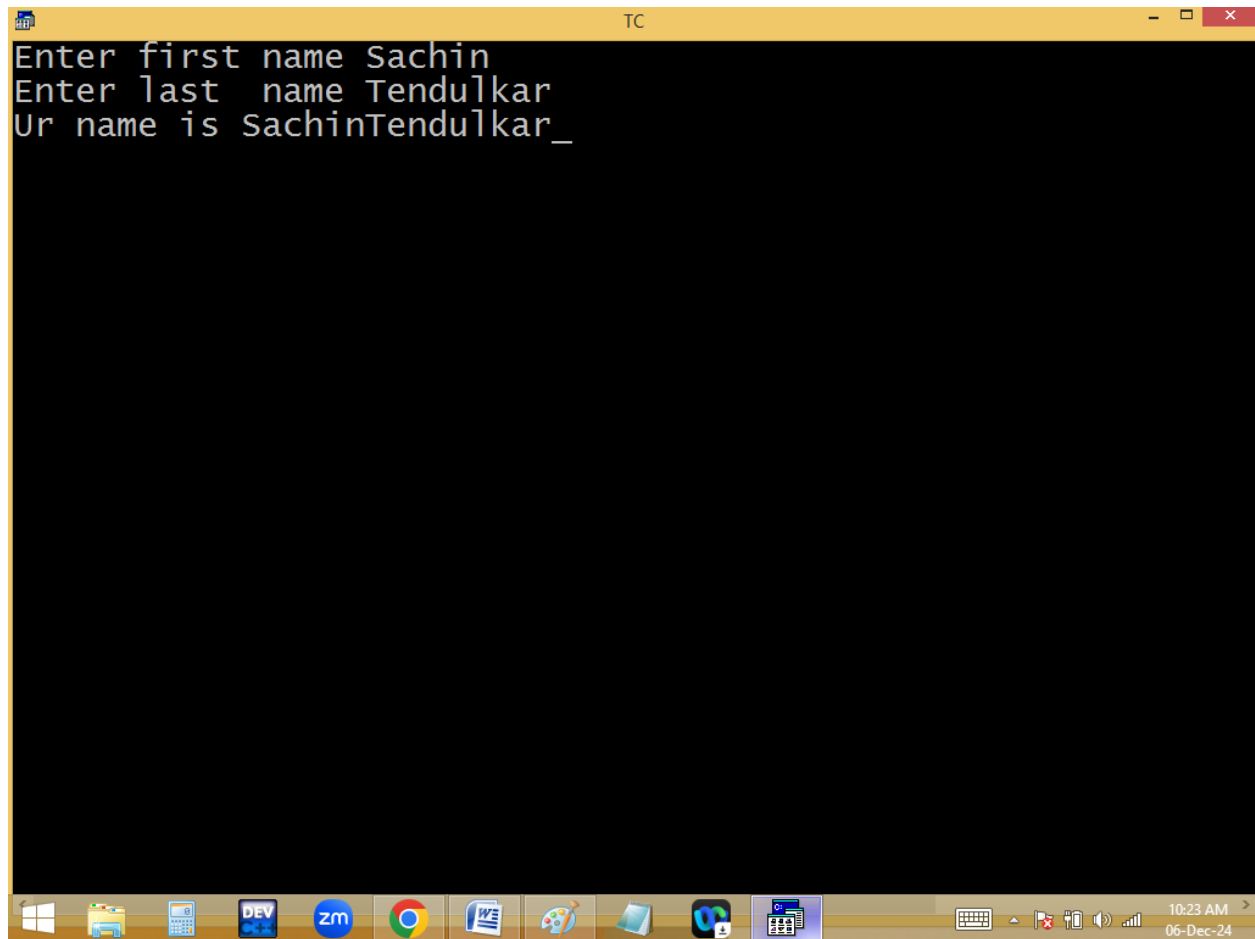
Ur email id is kishorenaidu@gmail.com

```
TC
File Edit Run Compile Project Options Debug
Line 10 Col 23 Insert Indent Tab Fill Unindent * E
#include<stdio.h>
#include<conio.h>
void main()
{
char s1[100],s2[100],s3[200]; int i,j;
clrscr();
printf("Enter first name "); gets(s1);
printf("Enter last name "); gets(s2);
for(i=0;s1[i]!='\0';i++)s3[i]=s1[i]; /* strcpy */
for( j=0; s2[j]!='\0';j++ )s3[i+j]=s2[j]; /*strcat */
s3[i+j]='\0';
printf("Ur name is %s",s3);
getch();
}
```

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Run

10:22 AM 06-Dec-24



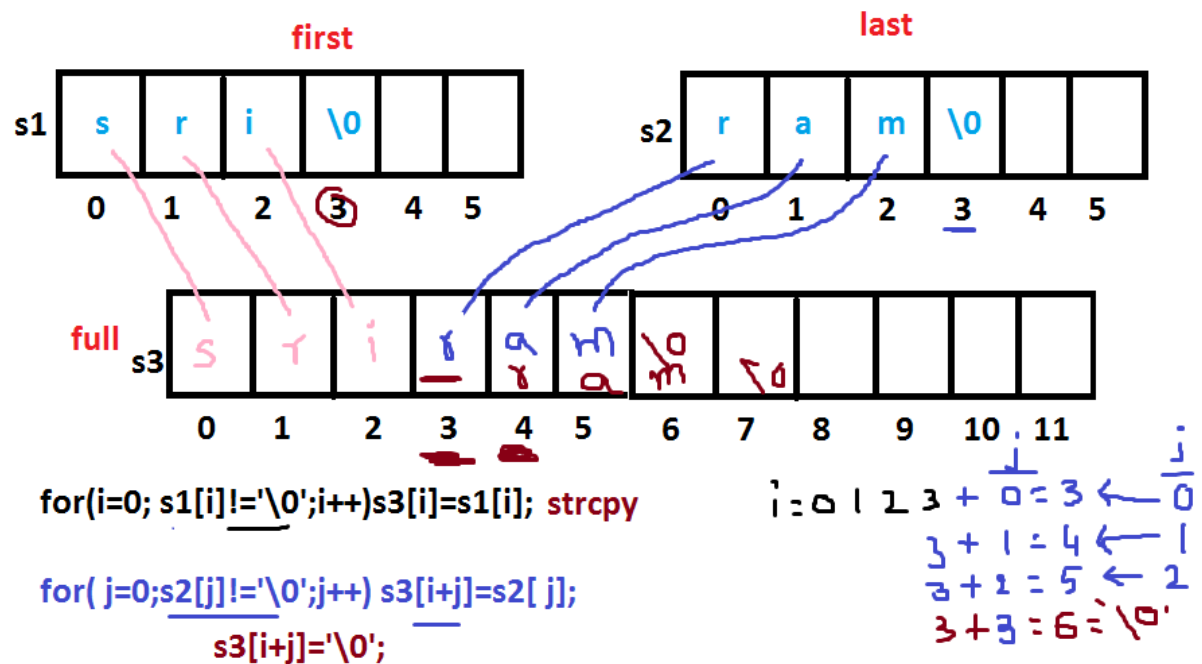
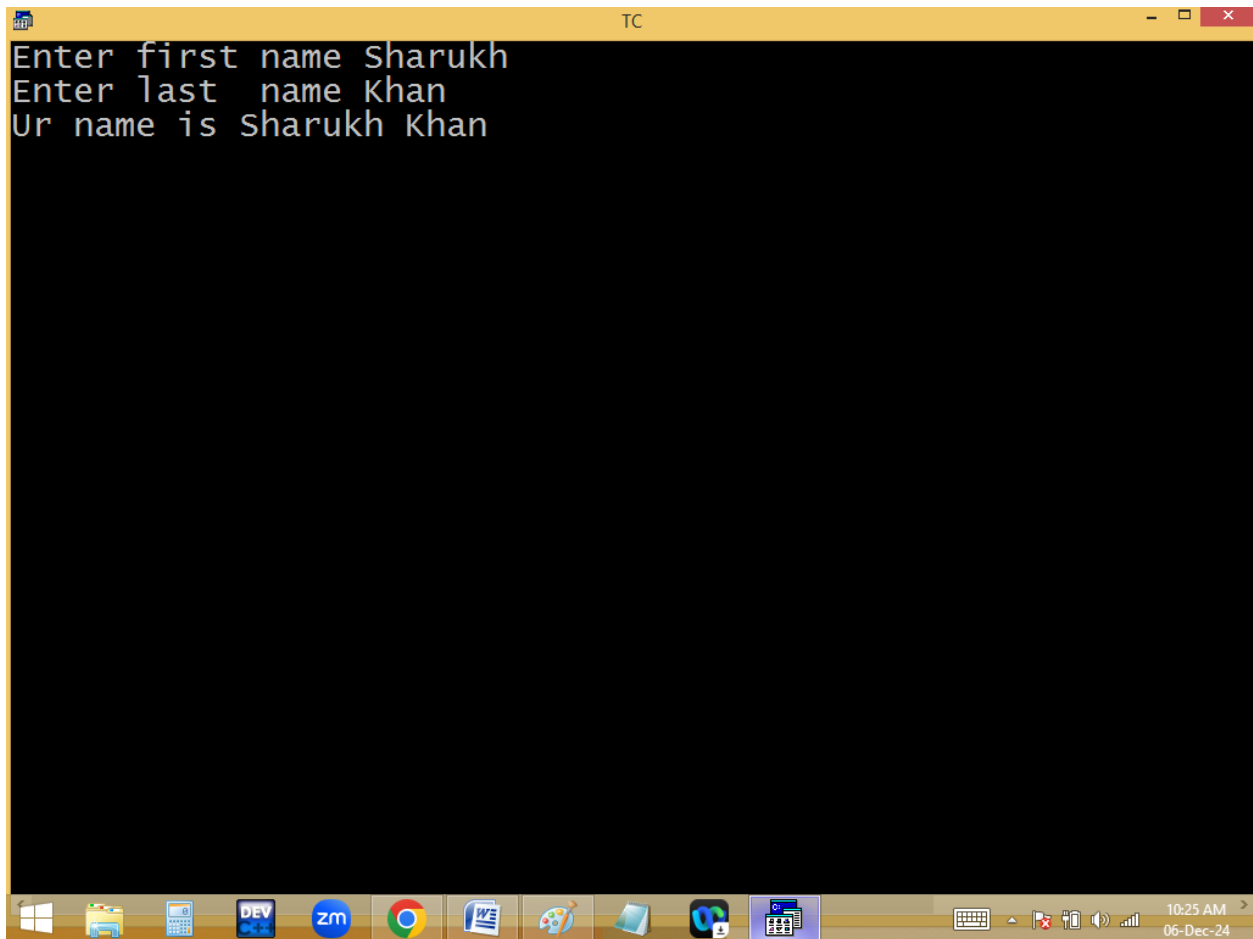


With space:

```
TC
File Edit Run Compile Project Options Debug
Line 10 Col 5 Insert Indent Tab Fill Unindent * E
#include<stdio.h>
#include<conio.h>
void main()
{
char s1[100],s2[100],s3[200]; int i,j;
clrscr();
printf("Enter first name "); gets(s1);
printf("Enter last name "); gets(s2);
for(i=0;s1[i]!='\0';i++)s3[i]=s1[i]; /* strcpy */
for(s3[i++]=' ',j=0;s2[j]!='\0';j++)s3[i+j]=s2[j]; /*strcat
s3[i+j]='\0';
printf("Ur name is %s",s3);
getch();
}
```

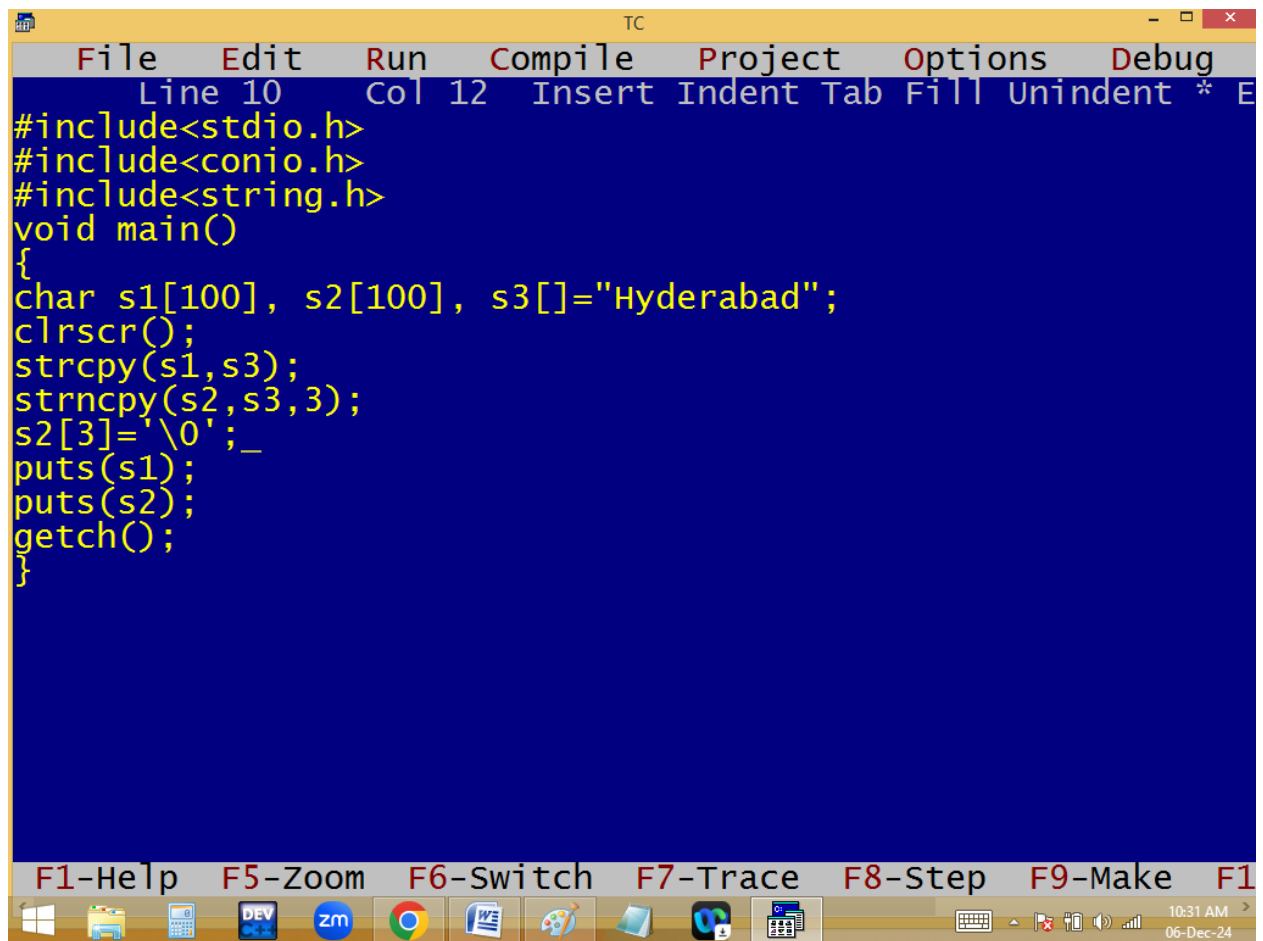
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Run

10:25 AM 06-Dec-24



strcpy(): It copies the source string into destination string.

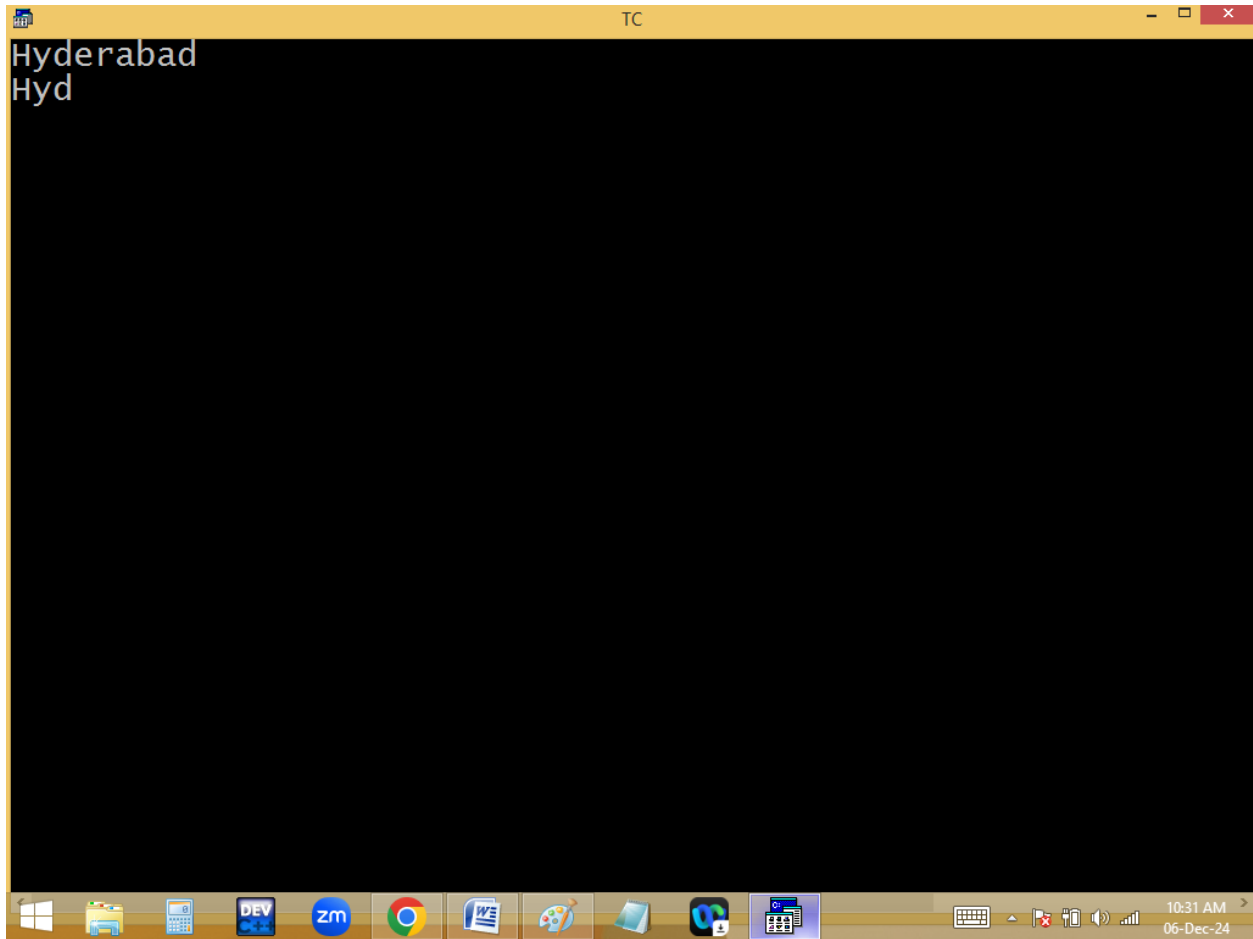
Strncpy(): it copies specified no of char into destination string.



The image shows a screenshot of the Turbo C++ (TC) IDE. The window title is "TC". The menu bar includes File, Edit, Run, Compile, Project, Options, and Debug. The status bar at the top indicates "Line 10 Col 12 Insert Indent Tab Fill Unindent * E". The code editor contains the following C program:

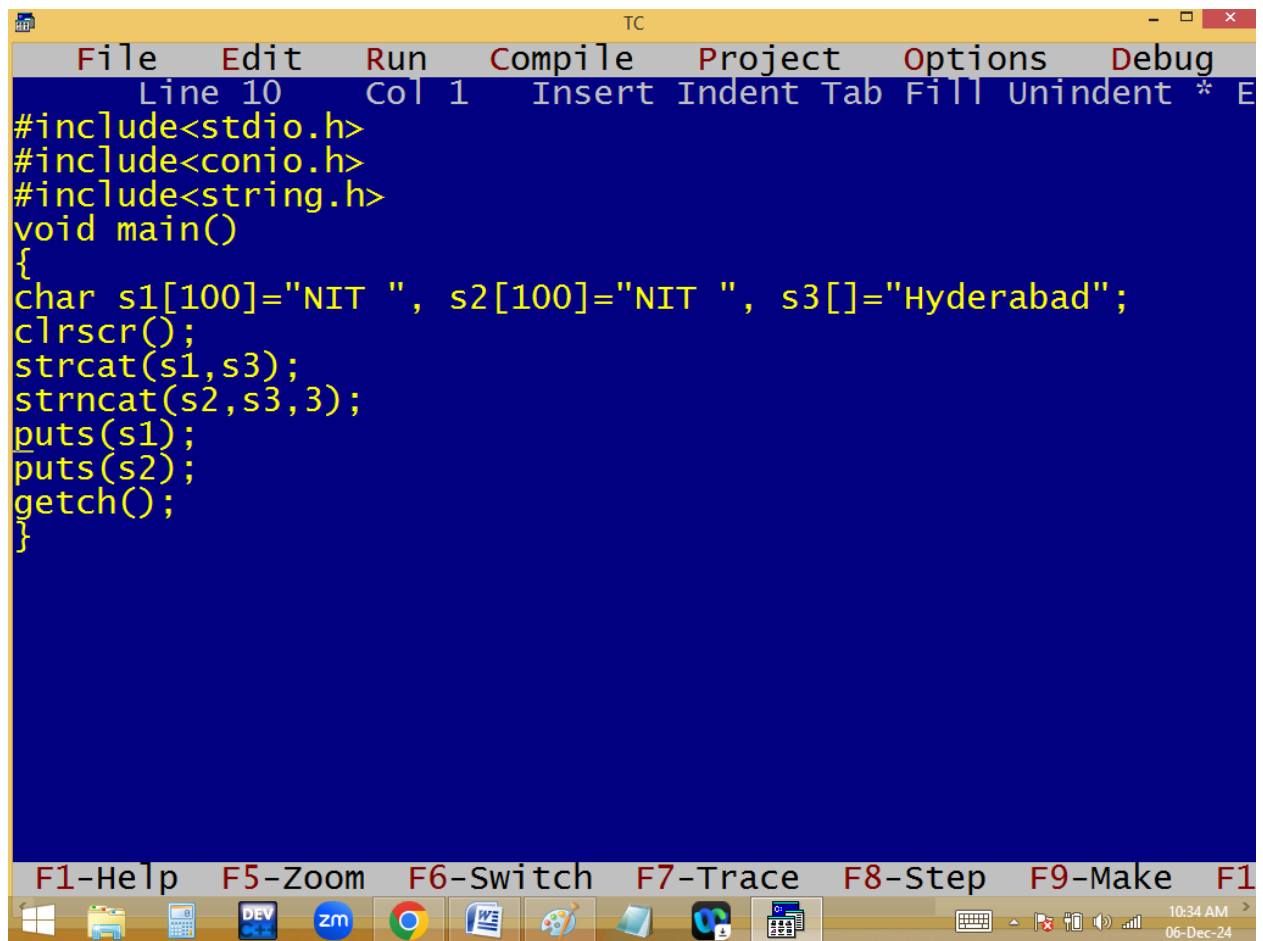
```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char s1[100], s2[100], s3[]="Hyderabad";
clrscr();
strcpy(s1,s3);
strncpy(s2,s3,3);
s2[3]='\0';
puts(s1);
puts(s2);
getch();
}
```

The bottom of the window features a toolbar with function key shortcuts: F1-Help, F5-Zoom, F6-Switch, F7-Trace, F8-Step, F9-Make, and F10-Run. The Windows taskbar at the bottom shows various application icons and the system clock indicating 10:31 AM on 06-Dec-24.



Strcat(): It adds string2 with string1


Strncat(): It adds specified no of char's to string1.



The image shows a screenshot of the Turbo C++ (TC) IDE. The window title is "TC". The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", and "Debug". Below the menu bar, a status bar shows "Line 10", "Col 1", and a list of editing actions: "Insert", "Indent", "Tab", "Fill", "Unindent", and a cursor icon. The main editing area has a dark blue background with yellow text. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char s1[100]="NIT ", s2[100]="NIT ", s3[]="Hyderabad";
clrscr();
strcat(s1,s3);
strncat(s2,s3,3);
puts(s1);
puts(s2);
getch();
}
```

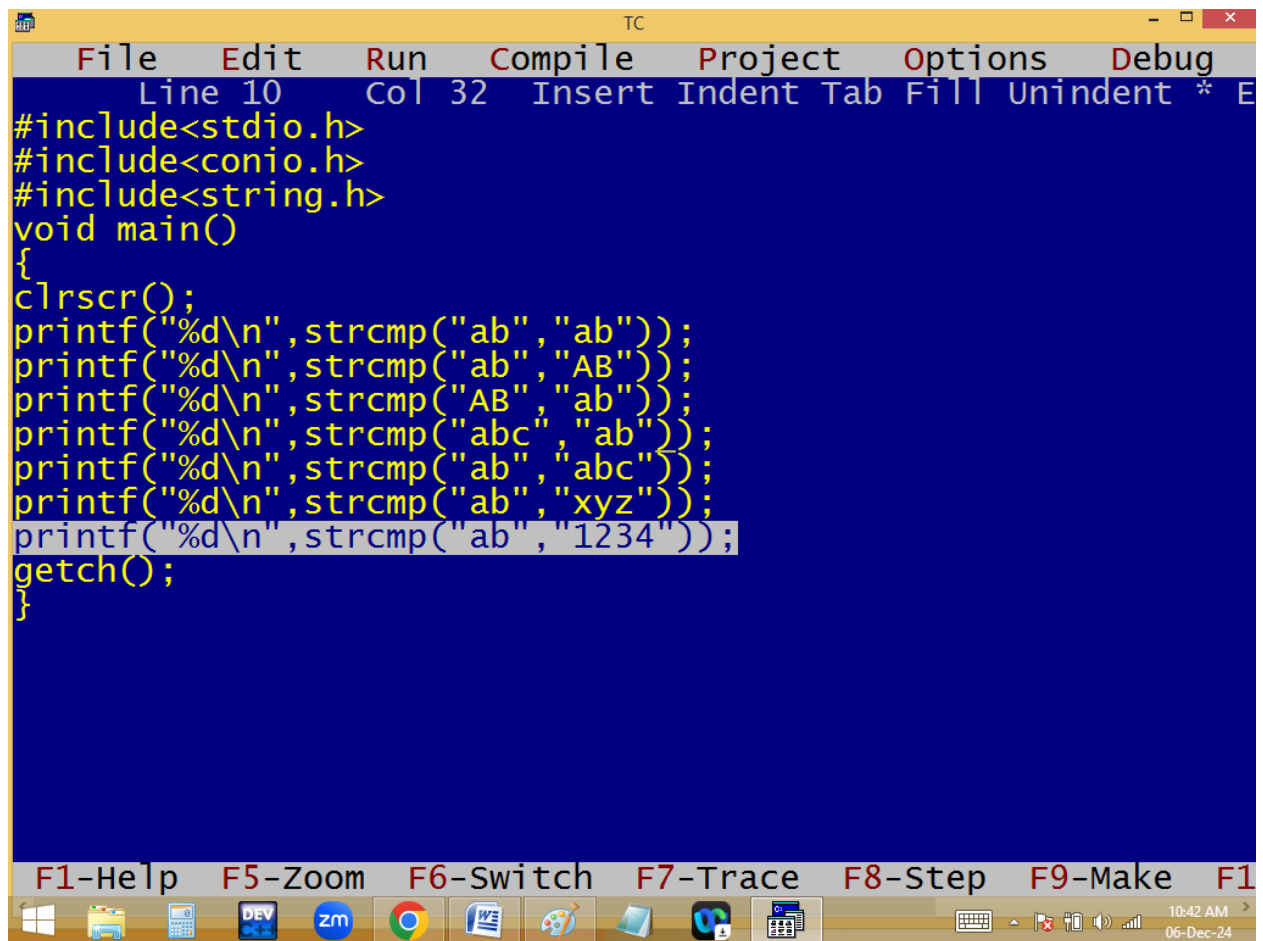
Below the code editor, there is a toolbar with function key shortcuts: "F1-Help", "F5-Zoom", "F6-Switch", "F7-Trace", "F8-Step", "F9-Make", and "F10-Run". The Windows taskbar is visible at the bottom, showing icons for the Start menu, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and the Turbo C++ application. The system clock in the bottom right corner shows "10:34 AM" and "06-Dec-24".



```
NIT Hyderabad
NIT Hyd
```

The screenshot shows a Windows command prompt window with a yellow title bar labeled 'TC'. The window contains two lines of text: 'NIT Hyderabad' and 'NIT Hyd'. The Windows taskbar at the bottom includes icons for the Start menu, File Explorer, Calculator, DEV, Zm, Chrome, Word, Paint, and a folder. The system tray on the right shows the time as 10:34 AM and the date as 06-Dec-24.

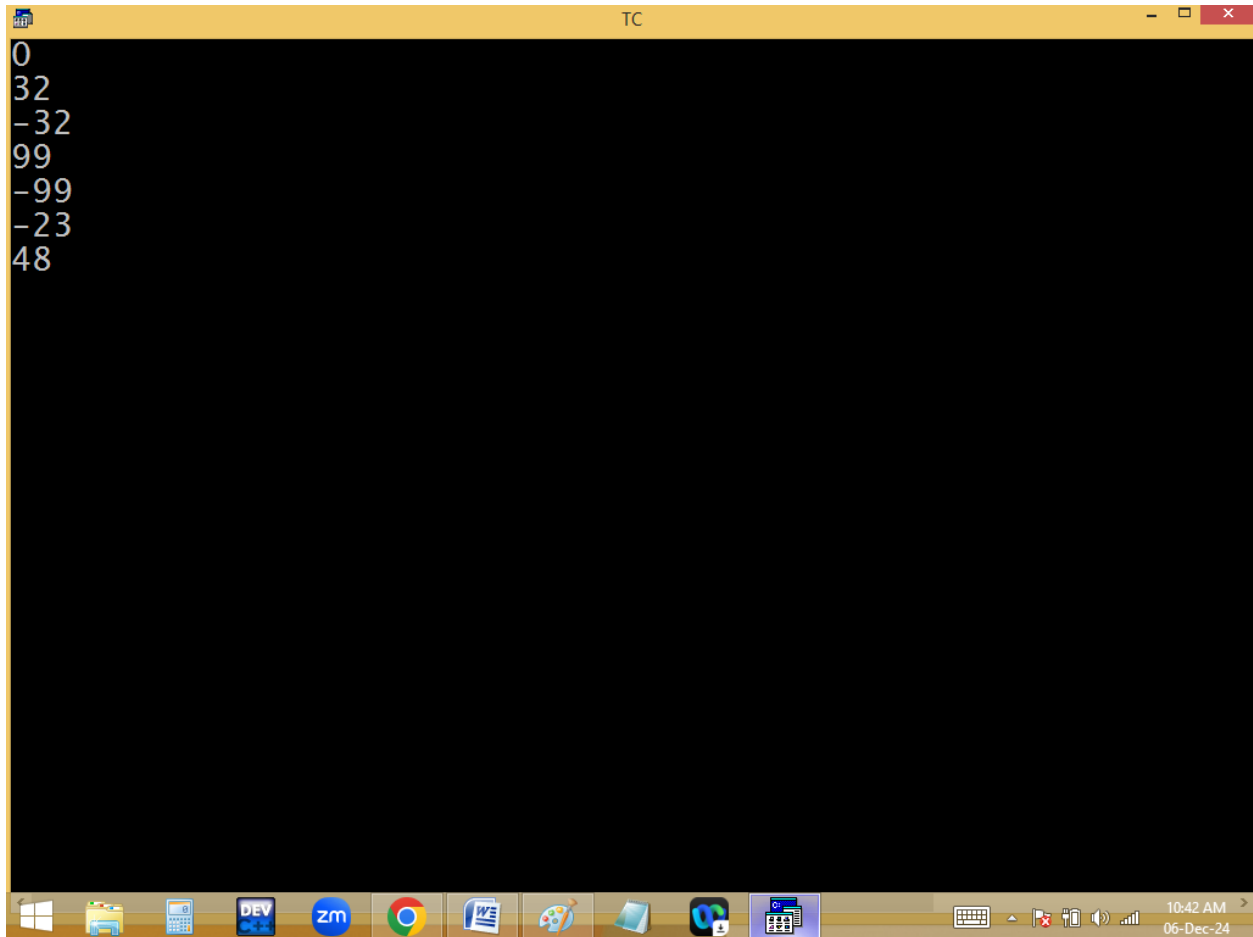
strcmp(): It compare two strings and return the ascii difference. When first is difference is found, the remaining string is not checked.



The image shows a screenshot of a Turbo C++ (TC) IDE window. The window has a yellow title bar with the text "TC" and standard window controls. The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", and "Debug". Below the menu bar, a status bar shows "Line 10", "Col 32", and a list of editing actions: "Insert", "Indent", "Tab", "Fill", "Unindent", and a cursor icon. The main editing area has a dark blue background with yellow text. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
clrscr();
printf("%d\n",strcmp("ab","ab"));
printf("%d\n",strcmp("ab","AB"));
printf("%d\n",strcmp("AB","ab"));
printf("%d\n",strcmp("abc","ab"));
printf("%d\n",strcmp("ab","abc"));
printf("%d\n",strcmp("ab","xyz"));
printf("%d\n",strcmp("ab","1234"));
getch();
}
```

At the bottom of the window, there is a toolbar with icons for various functions. Above the toolbar, a row of function key shortcuts is displayed: "F1-Help", "F5-Zoom", "F6-Switch", "F7-Trace", "F8-Step", "F9-Make", and "F10-Run". The Windows taskbar is visible at the very bottom, showing several application icons and the system clock indicating "10:42 AM" on "06-Dec-24".

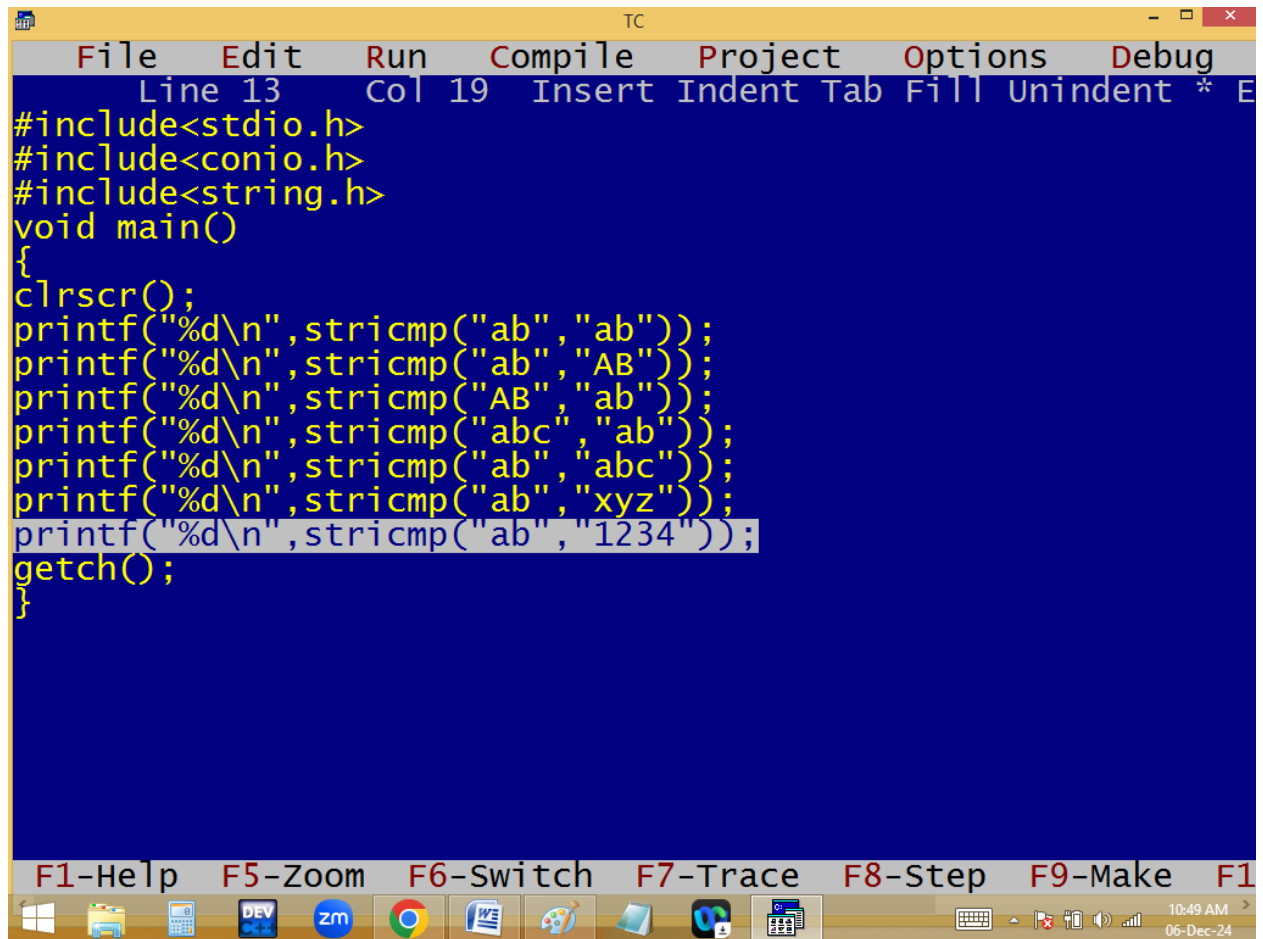


A screenshot of a Turbo C++ (TC) compiler window. The window has a yellow title bar with the text "TC" and standard window controls. The main area is black and contains a list of integers: 0, 32, -32, 99, -99, -23, and 48. The Windows taskbar is visible at the bottom, showing various application icons and the system clock indicating 10:42 AM on 06-Dec-24.

```
0
32
-32
99
-99
-23
48
```

stricmp():

in stricmp(), I means **ignore** case i.e. lower and upper are same. When matching char not found or different data type found in 2nd string, the first string char taken in upper case.



```
TC
File Edit Run Compile Project Options Debug
Line 13 Col 19 Insert Indent Tab Fill Unindent * E
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
clrscr();
printf("%d\n",strcmp("ab","ab"));
printf("%d\n",strcmp("ab","AB"));
printf("%d\n",strcmp("AB","ab"));
printf("%d\n",strcmp("abc","ab"));
printf("%d\n",strcmp("ab","abc"));
printf("%d\n",strcmp("ab","xyz"));
printf("%d\n",strcmp("ab","1234"));
getch();
}
```

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Run

10:49 AM 06-Dec-24

