

4 type of number formats:

1. Binary - %d
2. Decimal - %d
3. Octal - %o
4. Hexadecimal - %x

Strings:

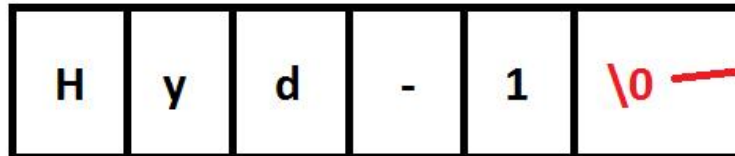
1. A group of characters is called string.
2. It is alpha-numeric. i.e. in a string we can store both alphabets, numbers and special characters.

Eg: `char city[6]="Hyd-1";`

MEMORY ALLOCATION FOR STRING:

R A M

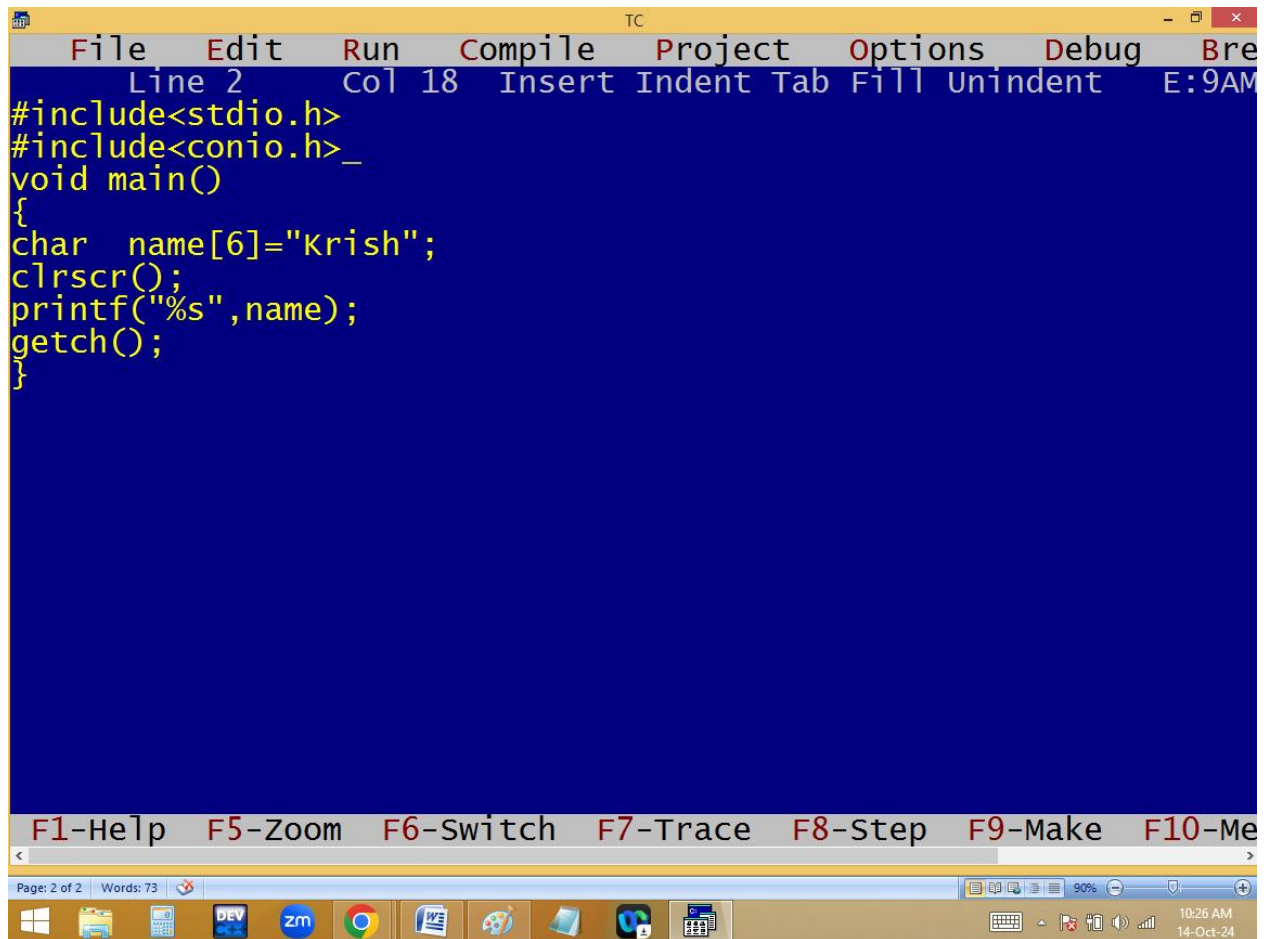
B Y T E S



NULL Char

Note:

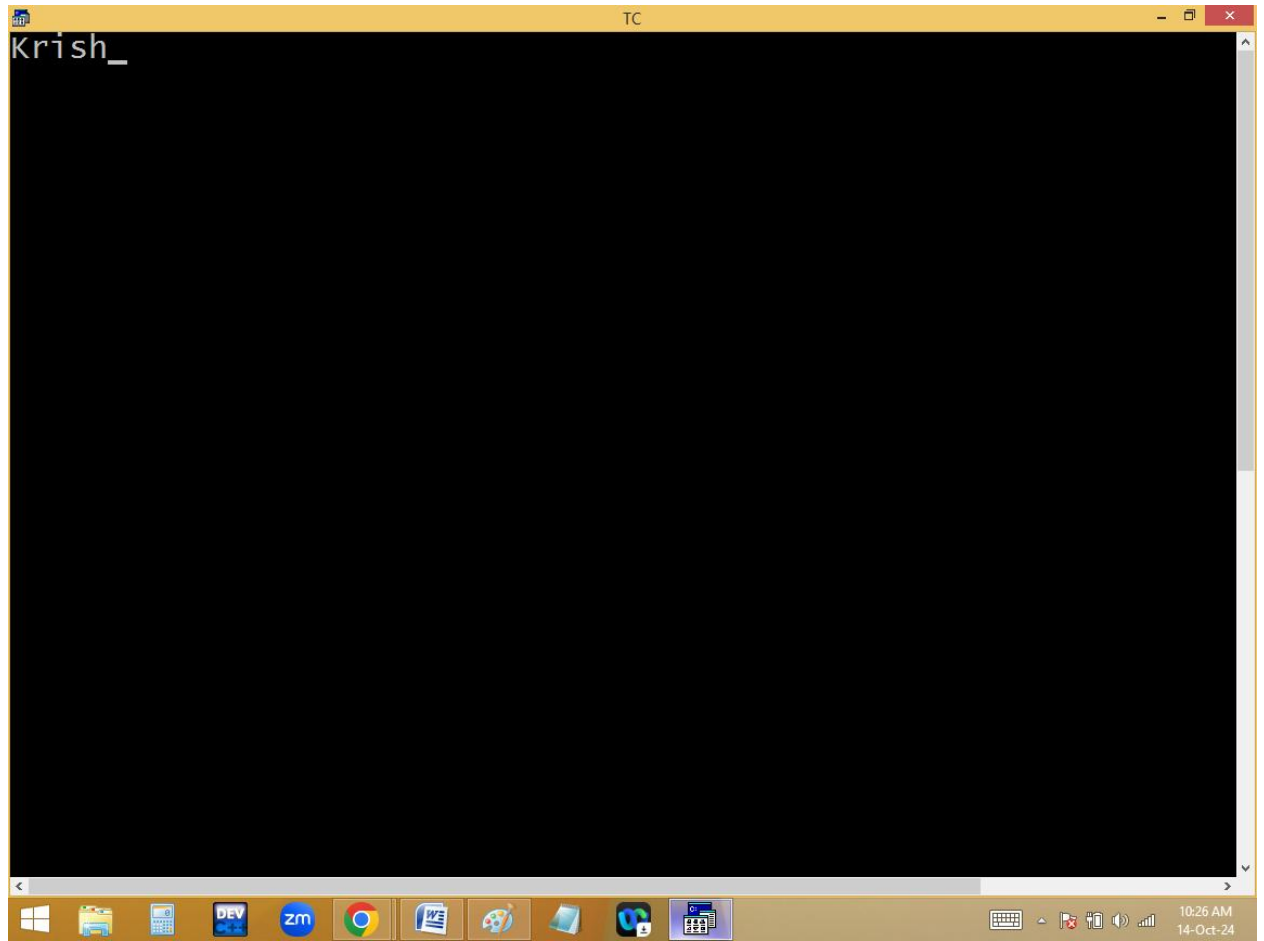
1. One byte should be left for NULL Char[\0]. Otherwise we are getting garbage values / Junk values.

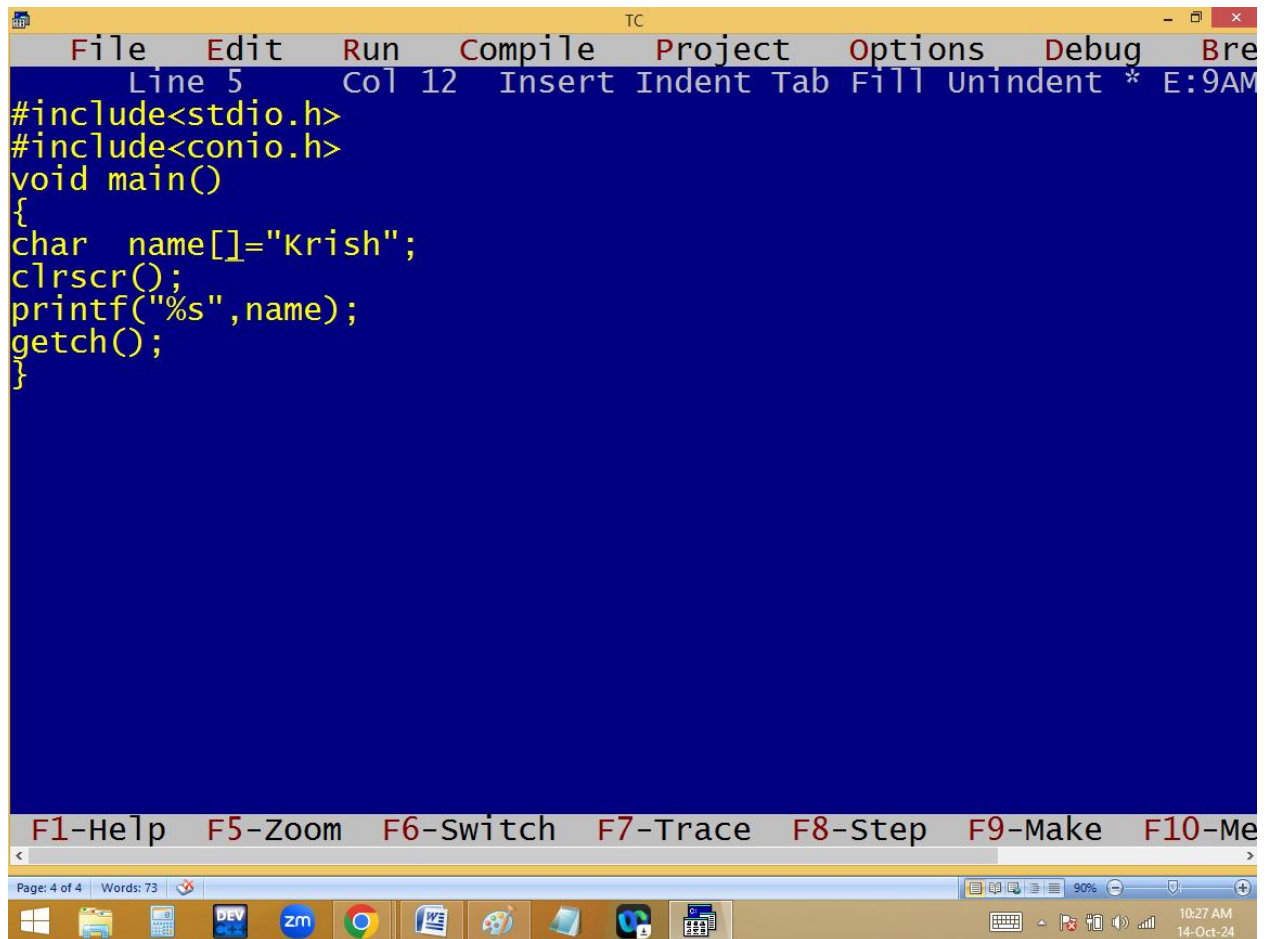


The image shows a screenshot of the Turbo C++ (TC) IDE. The window title is "TC". The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Breakpoint". The status bar at the top indicates "Line 2", "Col 18", and "Insert Indent Tab Fill Unindent". The time "E:9AM" is displayed on the right. The code editor contains the following C program:

```
#include<stdio.h>
#include<conio.h>_
void main()
{
char  name[6]="Krish";
clrscr();
printf("%s",name);
getch();
}
```

Below the code editor, a toolbar shows function key shortcuts: "F1-Help", "F5-Zoom", "F6-Switch", "F7-Trace", "F8-Step", "F9-Make", and "F10-Me". The bottom status bar shows "Page: 2 of 2", "Words: 73", and a zoom level of "90%". The Windows taskbar at the bottom includes icons for the Start menu, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and other applications. The system clock shows "10:26 AM" and "14-Oct-24".

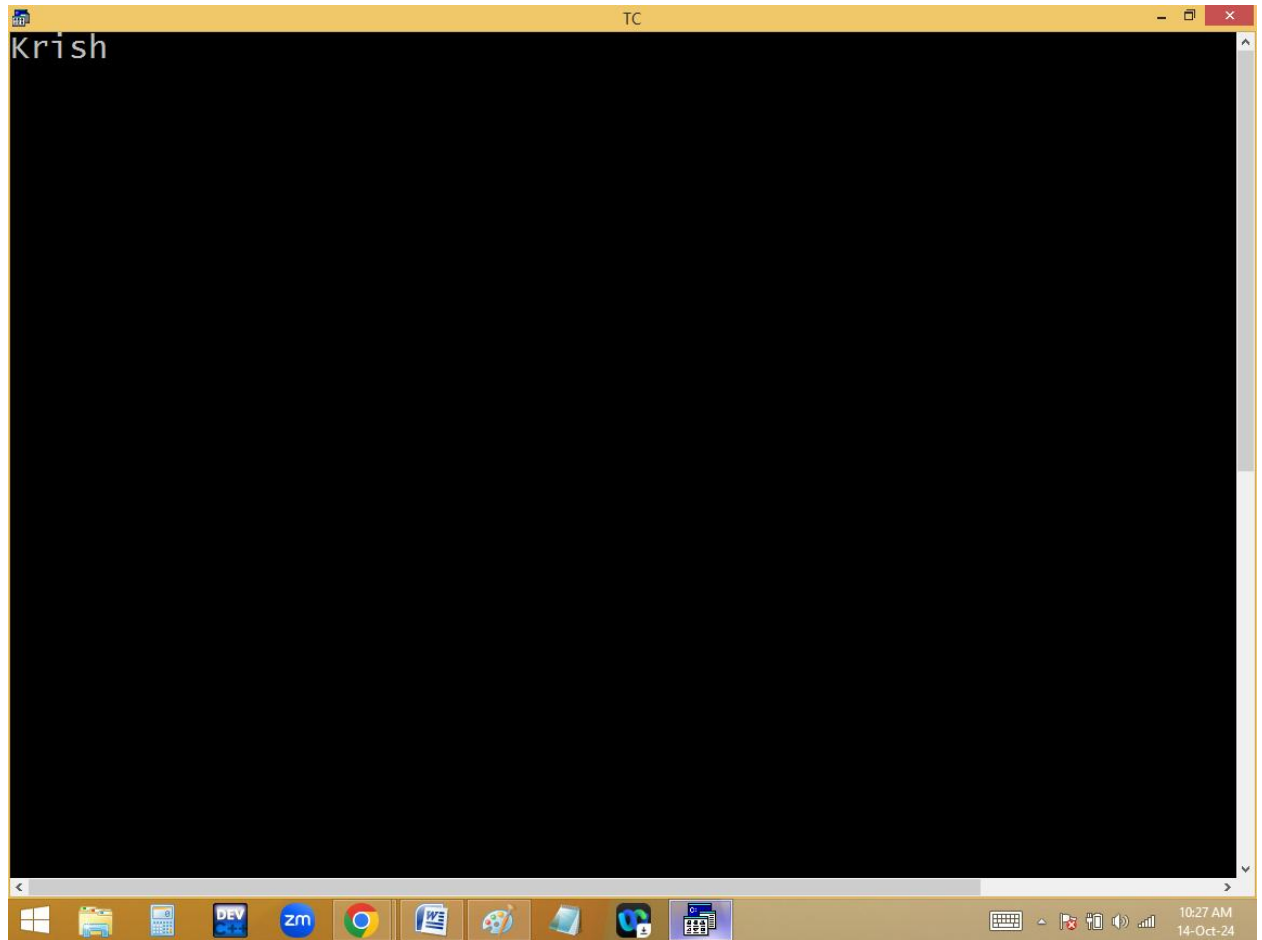




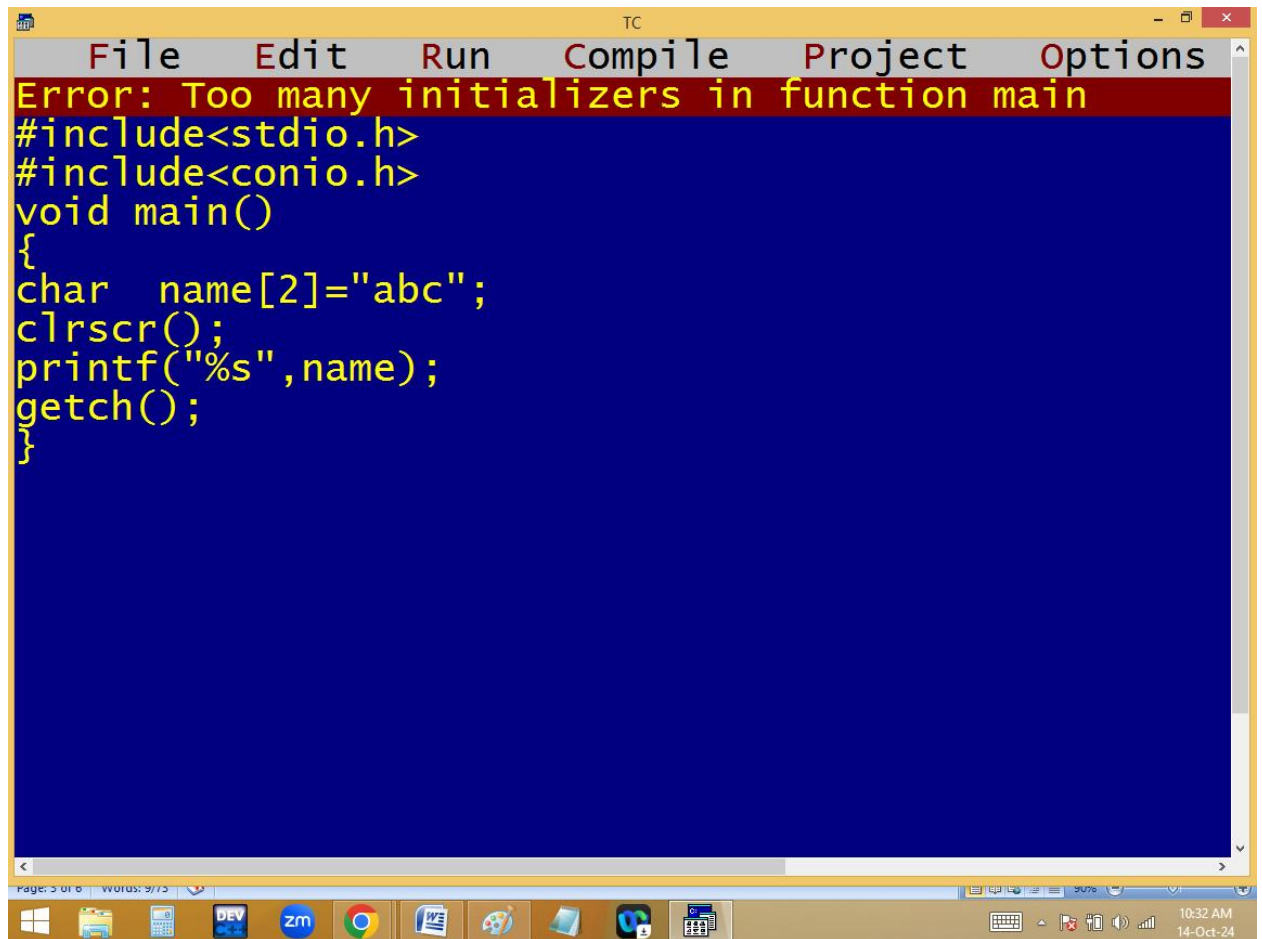
The image shows a screenshot of a Turbo C++ (TC) IDE window. The window has a yellow title bar with the text "TC" and standard window controls. The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Breakpoint". The status bar at the top indicates "Line 5", "Col 12", and "Insert Indent Tab Fill Unindent * E:9AM". The main editing area has a dark blue background and contains the following C code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
char  name[]="Krish";
clrscr();
printf("%s",name);
getch();
}
```

Below the code, there is a toolbar with function key shortcuts: "F1-Help", "F5-Zoom", "F6-Switch", "F7-Trace", "F8-Step", "F9-Make", and "F10-Me". At the bottom, a status bar shows "Page: 4 of 4" and "Words: 73". The Windows taskbar is visible at the very bottom, showing icons for Windows, File Explorer, Calculator, DEV C++, Zoom, Chrome, Word, Paint, and other applications. The system clock in the bottom right corner shows "10:27 AM" and "14-Oct-24".



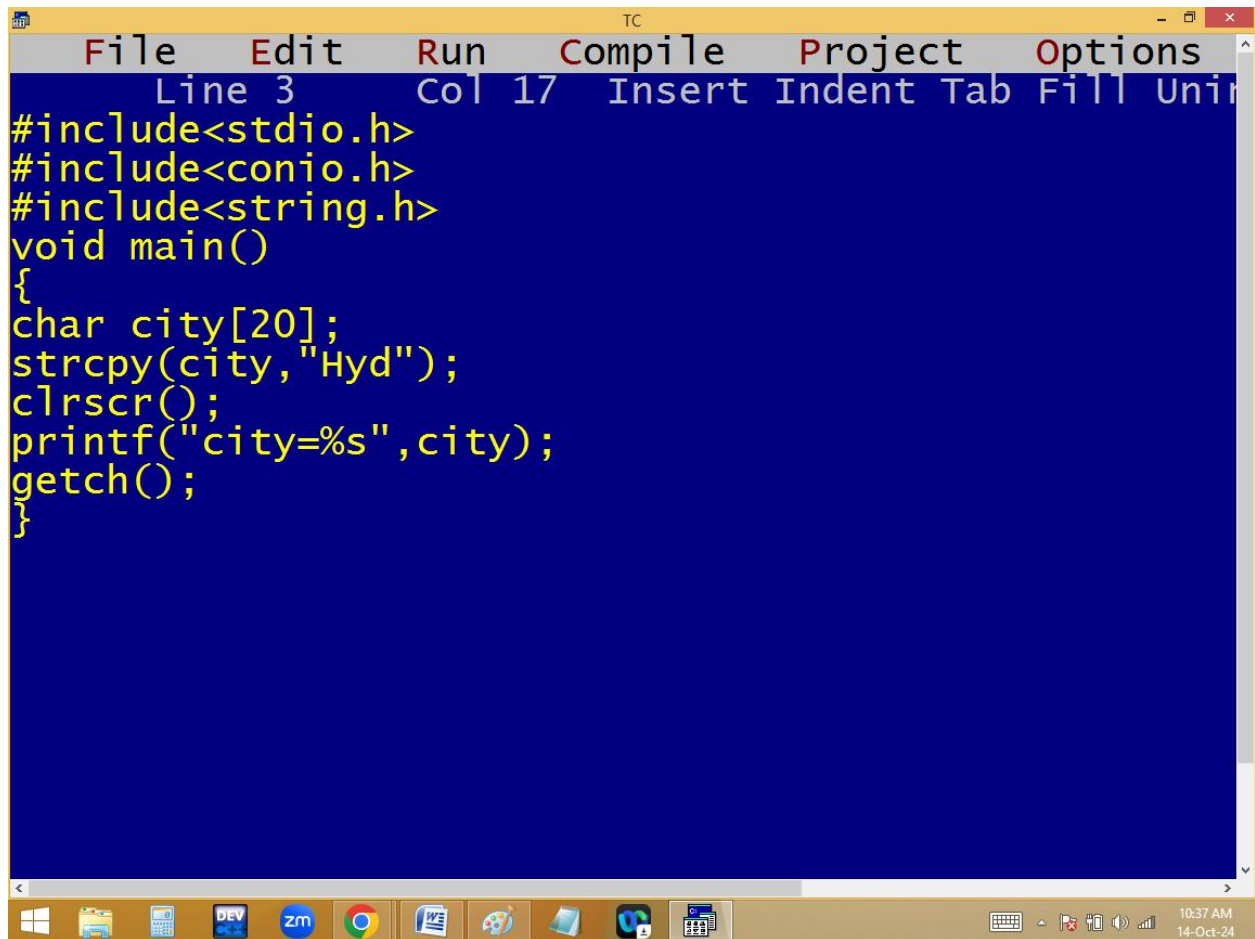
2. String variable size never smaller than string. Otherwise we are getting error.

A screenshot of the Turbo C++ (TC) compiler interface. The window title is 'TC'. The menu bar includes 'File', 'Edit', 'Run', 'Compile', 'Project', and 'Options'. A red error message banner at the top reads 'Error: Too many initializers in function main'. Below the banner, the following C code is displayed on a blue background:

```
#include<stdio.h>
#include<conio.h>
void main()
{
char  name[2]="abc";
clrscr();
printf("%s",name);
getch();
}
```

The Windows taskbar is visible at the bottom, showing icons for Windows, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and other applications. The system clock shows 10:32 AM on 14-Oct-24.

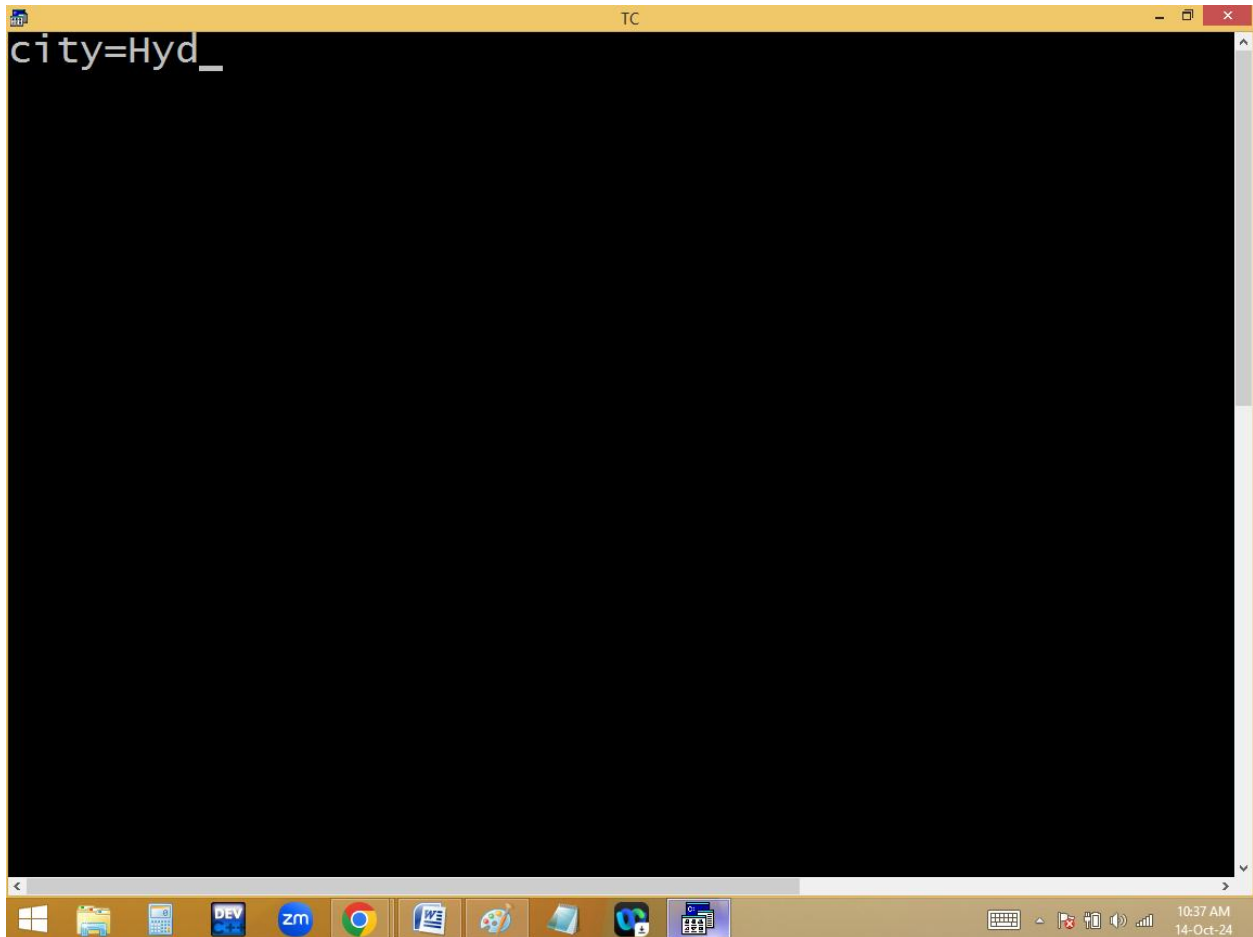
3. We can't copy a string into a string variable using = [assignment] operator. We have to use strcpy() for this.



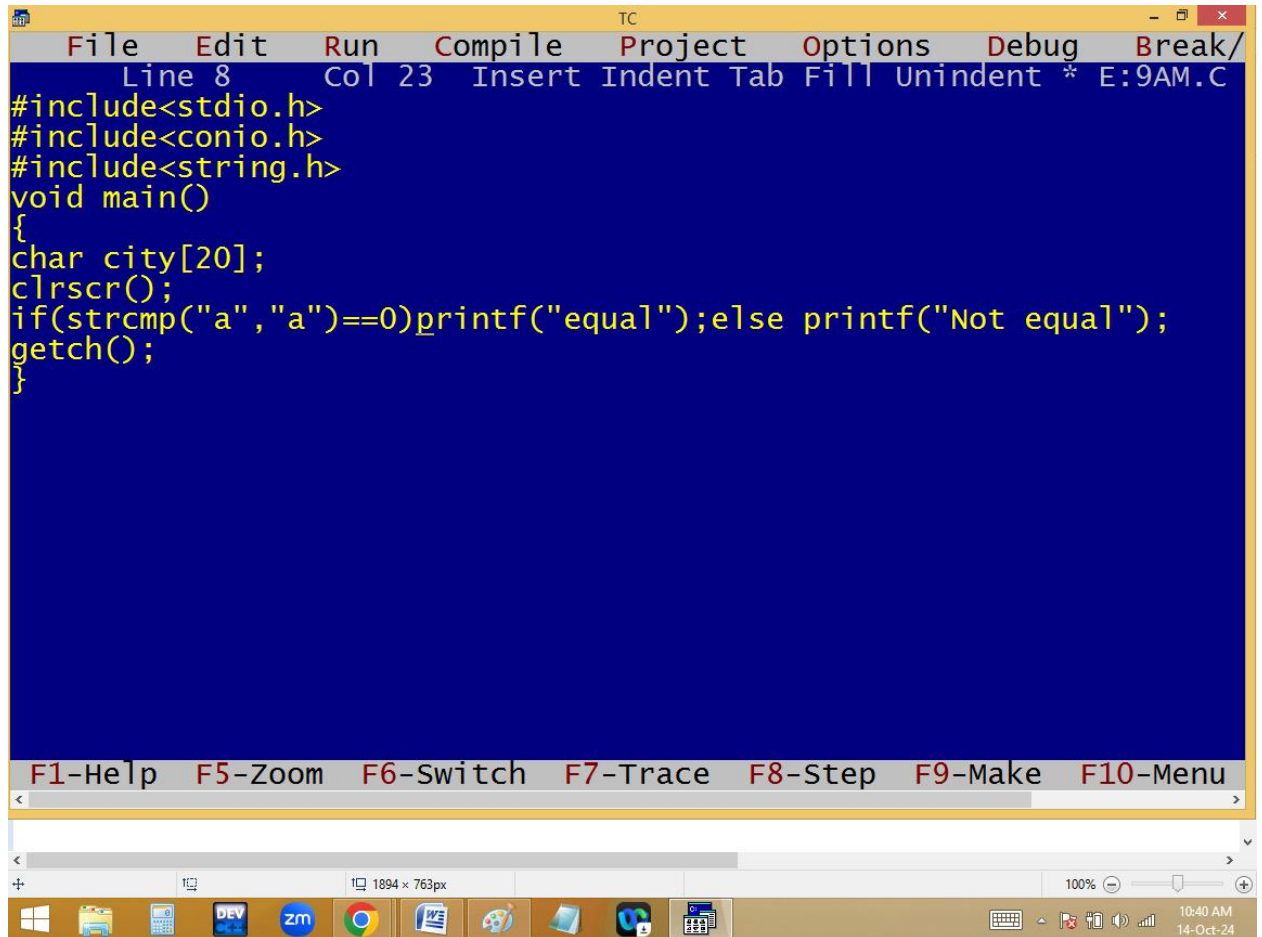
The image shows a screenshot of a Turbo C++ (TC) IDE window. The window has a yellow title bar with the text "TC" and standard window controls. The menu bar includes "File", "Edit", "Run", "Compile", "Project", and "Options". Below the menu bar, a status bar shows "Line 3", "Col 17", and some menu shortcuts like "Insert", "Indent", "Tab", "Fill", and "Unin". 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 city[20];
strcpy(city,"Hyd");
clrscr();
printf("city=%s",city);
getch();
}
```

At the bottom of the window is a Windows taskbar with various icons including Windows Start, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and others. The system clock in the bottom right corner shows "10:37 AM" and "14-Oct-24".



4. We can't compare two strings with comparison operator [==]. We have to use strcmp().



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", "Debug", and "Break/". The status bar at the top indicates "Line 8", "Col 23", and "Insert Indent Tab Fill Unindent * E:9AM.C". 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 city[20];
clrscr();
if(strcmp("a","a")==0)printf("equal");else printf("Not equal");
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-Menu". The bottom of the screen shows the Windows taskbar with icons for Windows, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and a folder. The system tray on the right shows the time as "10:40 AM" and the date as "14-Oct-24".

