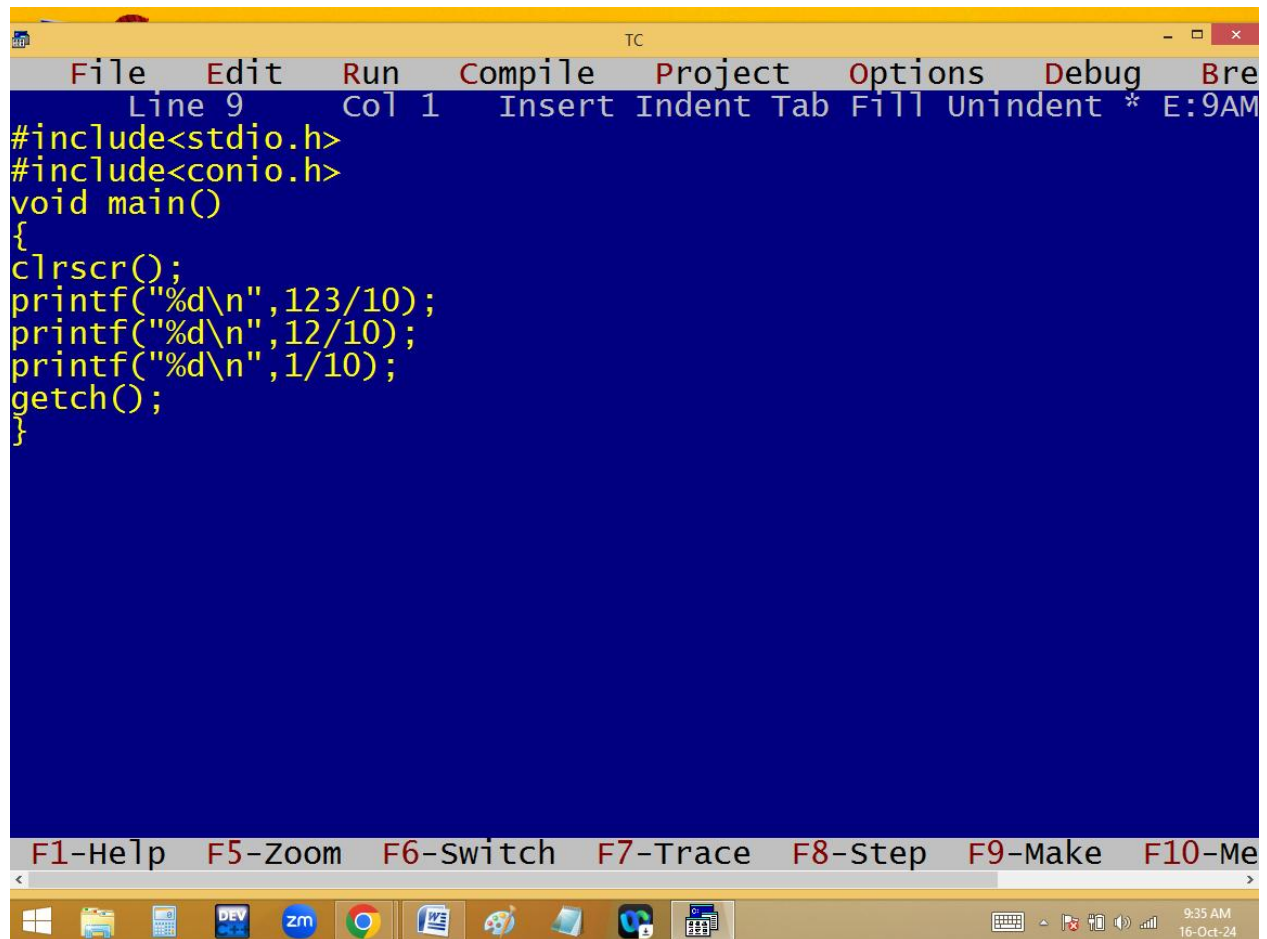


$$123/10=12$$

$$12/10=1$$

$$1/10=0$$

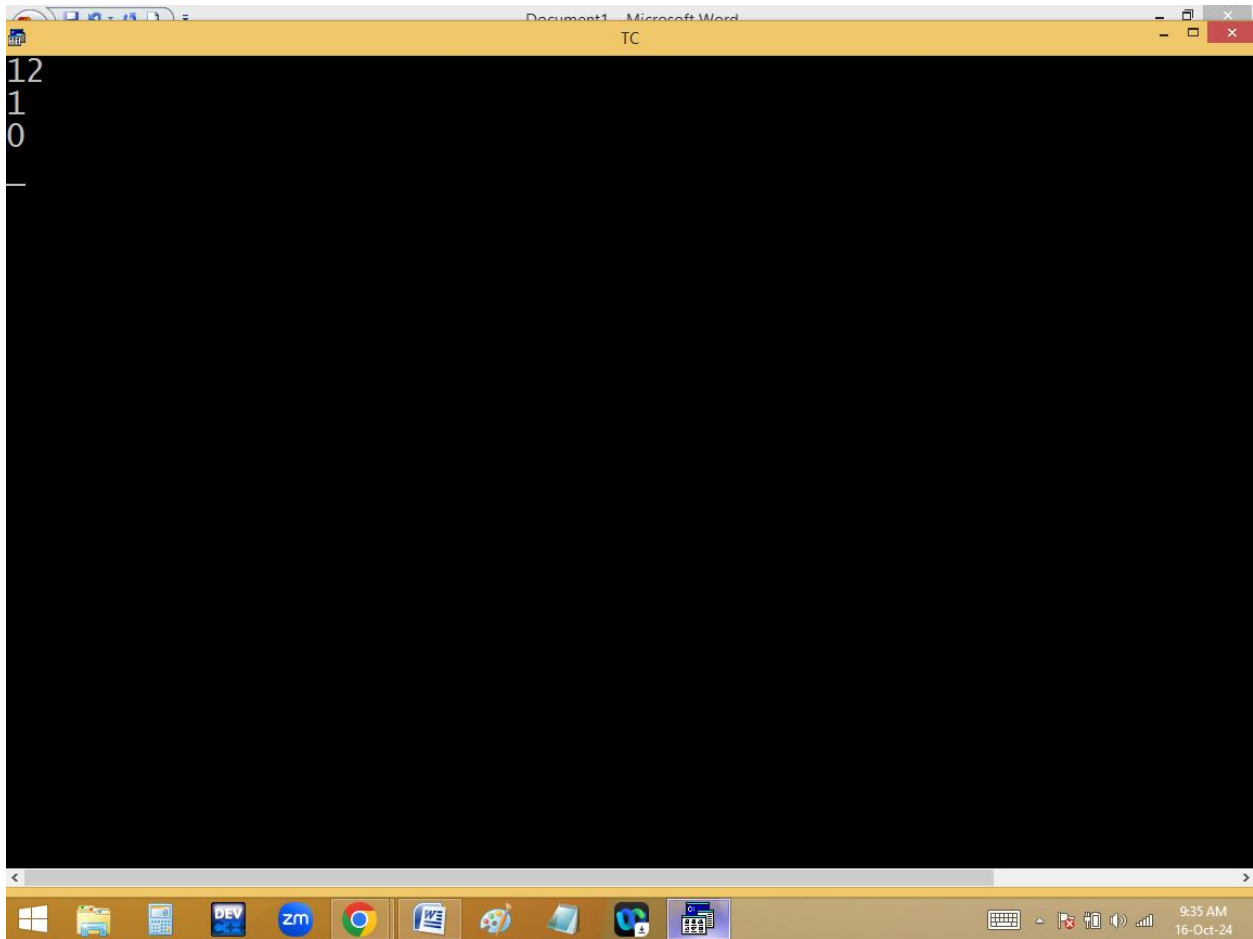
**Note:** Any no/10 removes the last digit.



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 9", "Col 1", and "Insert Indent Tab Fill Unindent \* E:9AM". The main editing area has a dark blue background with yellow text. It contains the following C code:

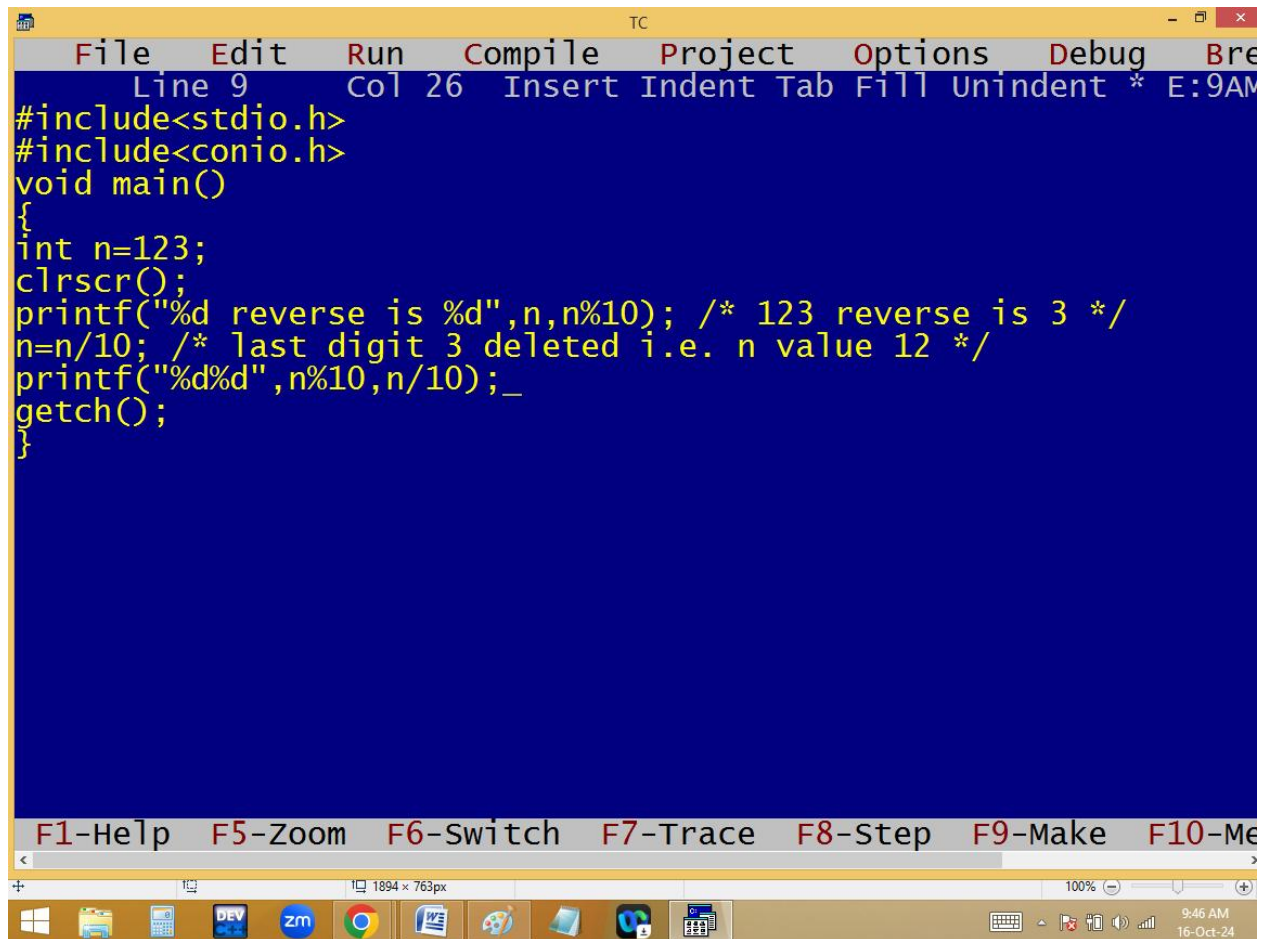
```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n",123/10);
printf("%d\n",12/10);
printf("%d\n",1/10);
getch();
}
```

Below the code editor is a toolbar with icons for various functions. At the bottom, there is a secondary menu bar with function key shortcuts: "F1-Help", "F5-Zoom", "F6-Switch", "F7-Trace", "F8-Step", "F9-Make", and "F10-Me". The Windows taskbar is visible at the very bottom, showing icons for the Start menu, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and other applications. The system clock in the bottom right corner shows "9:35 AM" and "16-Oct-24".



**Write a c program to print a 3 digit no in reverse order without using loop.**

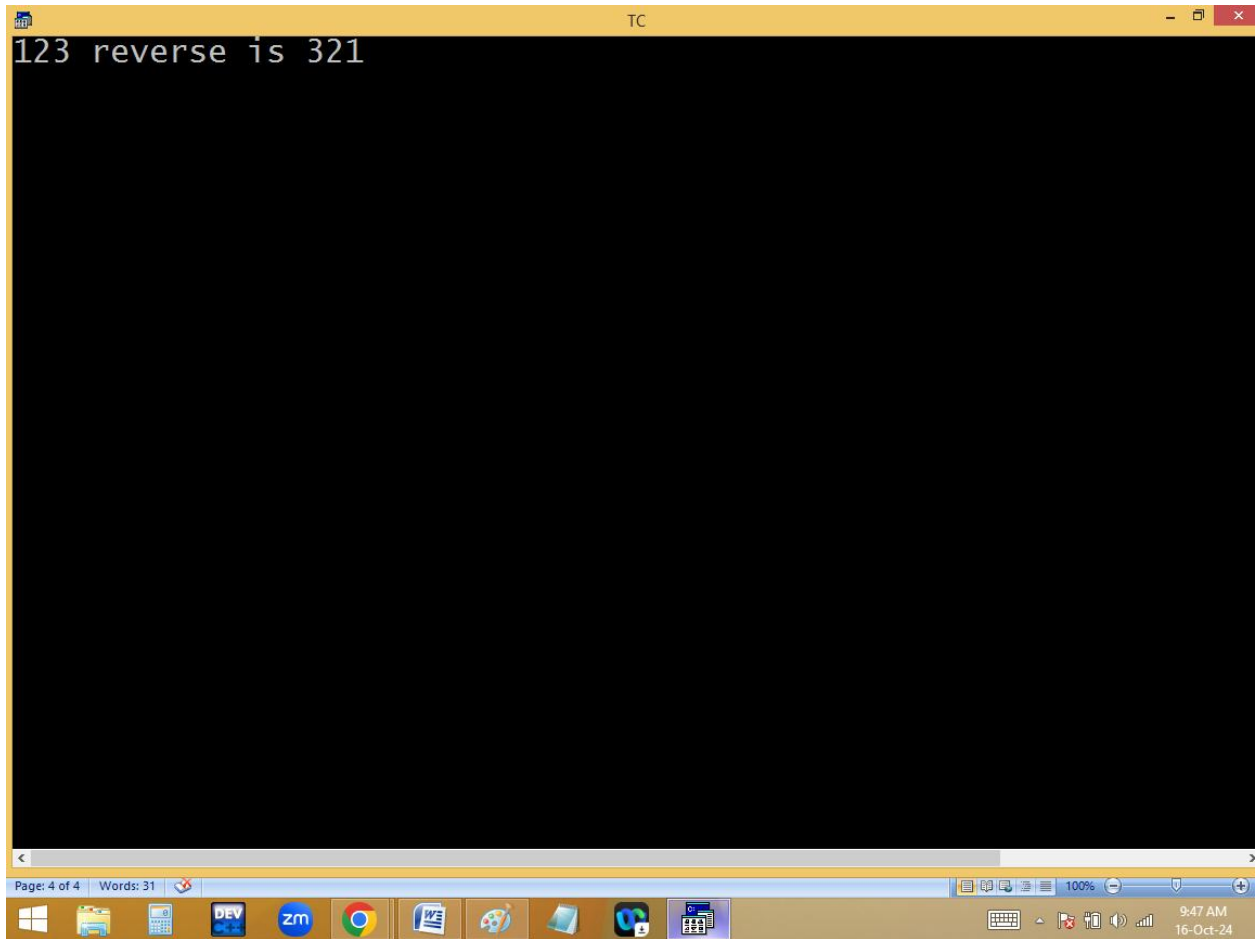
Eg: 123 reverse is 321

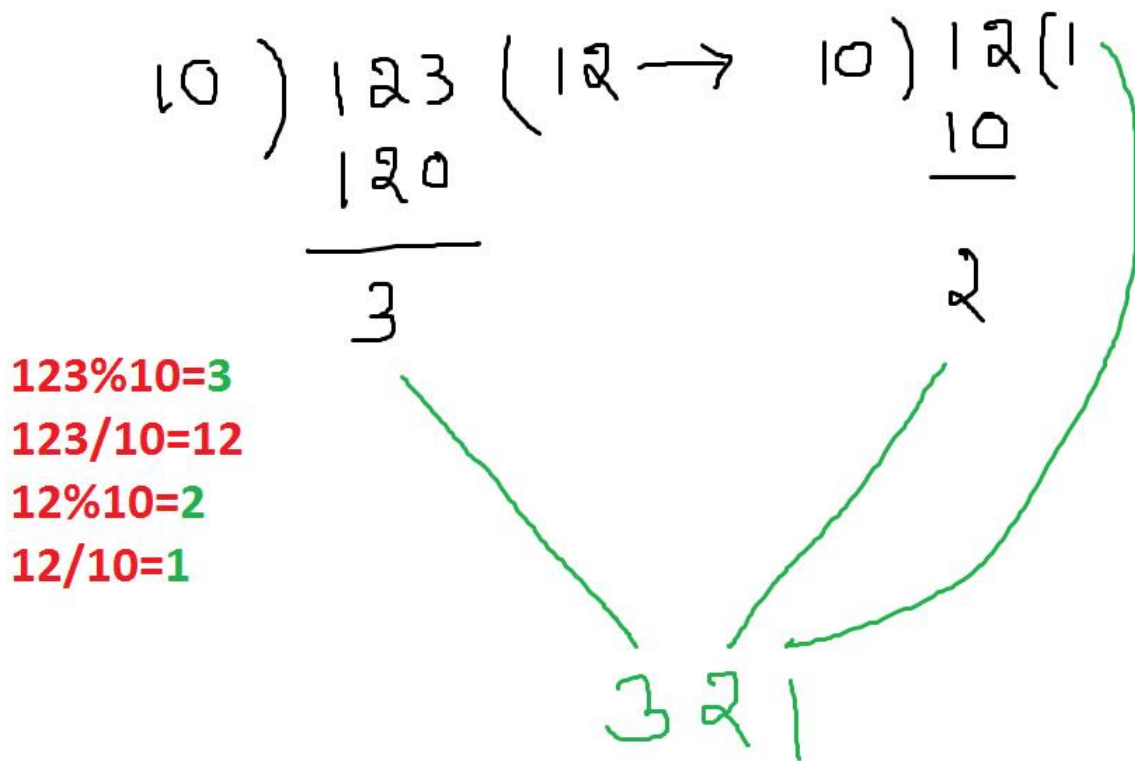


The image shows a screenshot of the Turbo C++ (TC) IDE. The window title is "TC". The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Breakpoint". The status bar at the top indicates "Line 9", "Col 26", and "Insert Indent Tab Fill Unindent \* E:9AM". The main editing area has a blue background and contains the following C code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n=123;
clrscr();
printf("%d reverse is %d",n,n%10); /* 123 reverse is 3 */
n=n/10; /* last digit 3 deleted i.e. n value 12 */
printf("%d%d",n%10,n/10);_
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". The bottom status bar shows "1894 x 763px", "100%", and the system clock "9:46 AM 16-Oct-24". The Windows taskbar is visible at the very bottom with icons for Windows, File Explorer, Calculator, DEV C++, Zoom, Chrome, Word, Paint, and other applications.



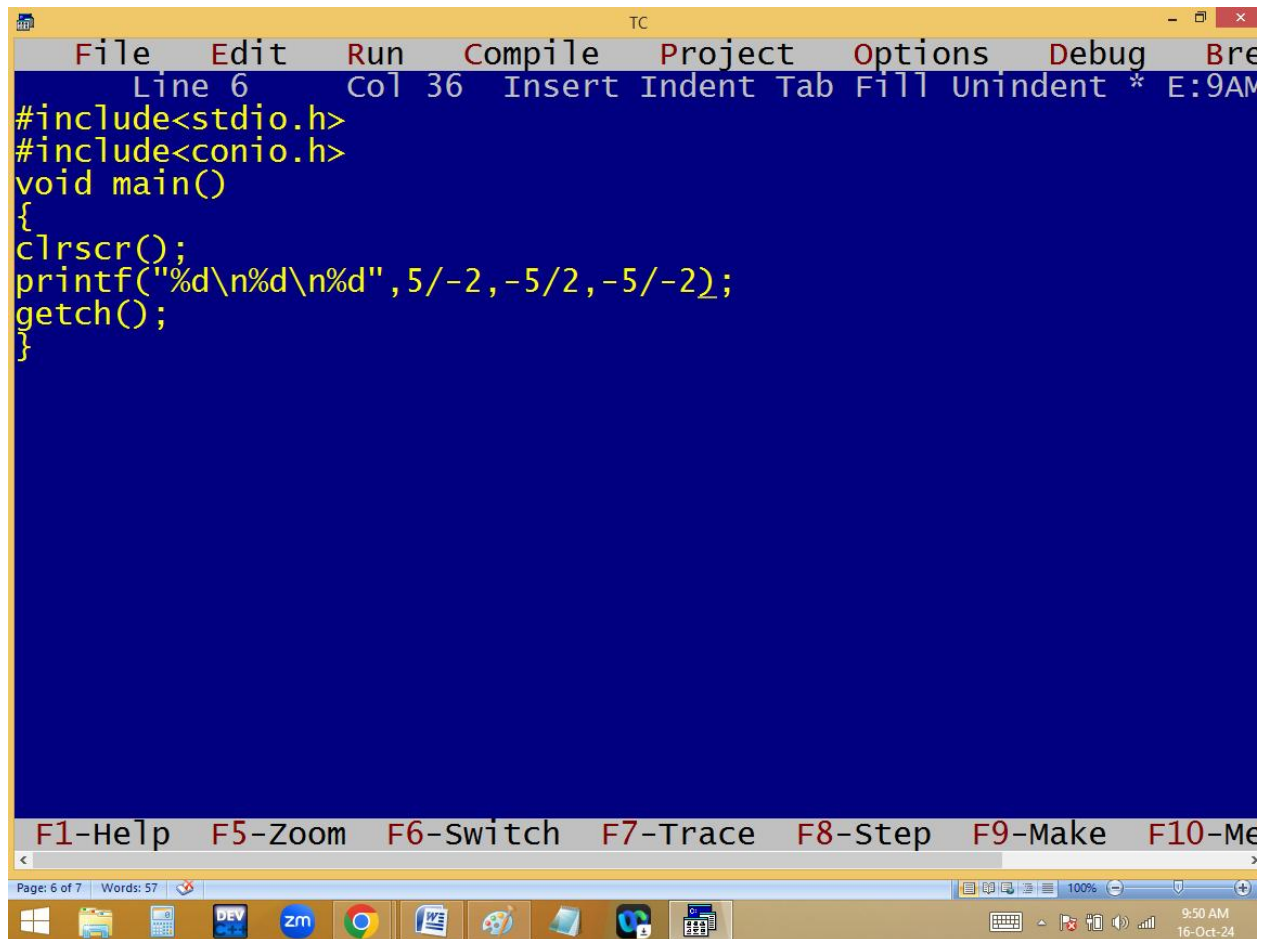


$$-5/2 = -2$$

$$5/-2 = -2$$

$$-5/-2 = 2$$

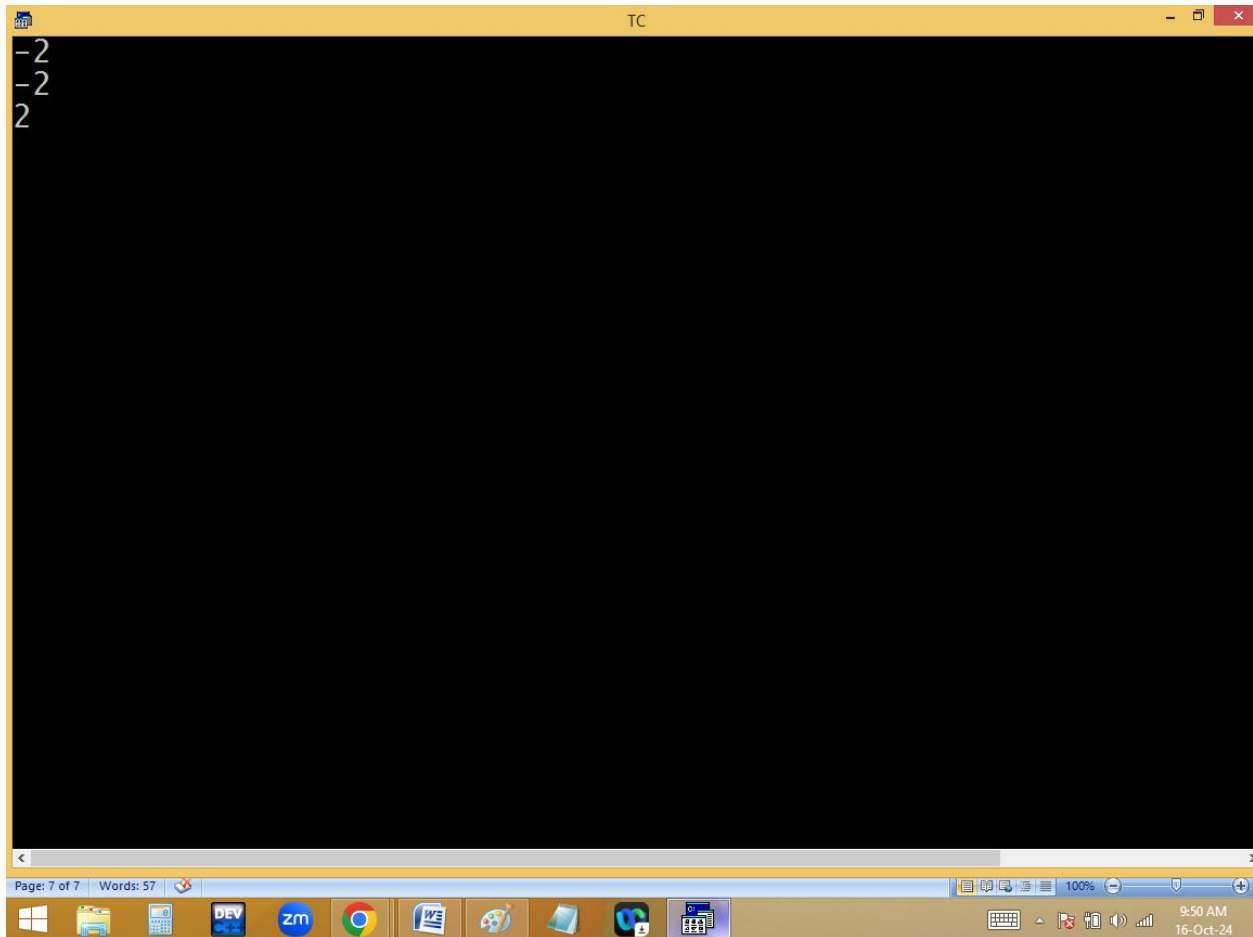
**Note:** In division any one operand is negative then result also negative. If both are negative then result is positive.



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 shows "Line 6", "Col 36", and "Insert Indent Tab Fill Unindent \* E:9AM". The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n%d\n%d", 5/-2, -5/2, -5/-2);
getch();
}
```

Below the code, there is a line of function key shortcuts: "F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Me". The bottom status bar shows "Page: 6 of 7", "Words: 57", and a zoom level of "100%". The Windows taskbar at the bottom includes icons for Windows, File Explorer, Calculator, DEV C++, Zoom, Chrome, Word, Paint, and other applications. The system clock in the bottom right corner shows "9:50 AM" and "16-Oct-24".



```
-2
-2
2
```

The screenshot shows a Turbo C++ (TC) compiler window. The title bar reads "TC". The main editing area contains three lines of code: `-2`, `-2`, and `2`. The Windows taskbar at the bottom shows the time as 9:50 AM on 16-Oct-24. The taskbar includes icons for Windows, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and other applications.

**Relational operators [ == ( comparison), <, >, <=, >=, != ( not equal ) ]:**

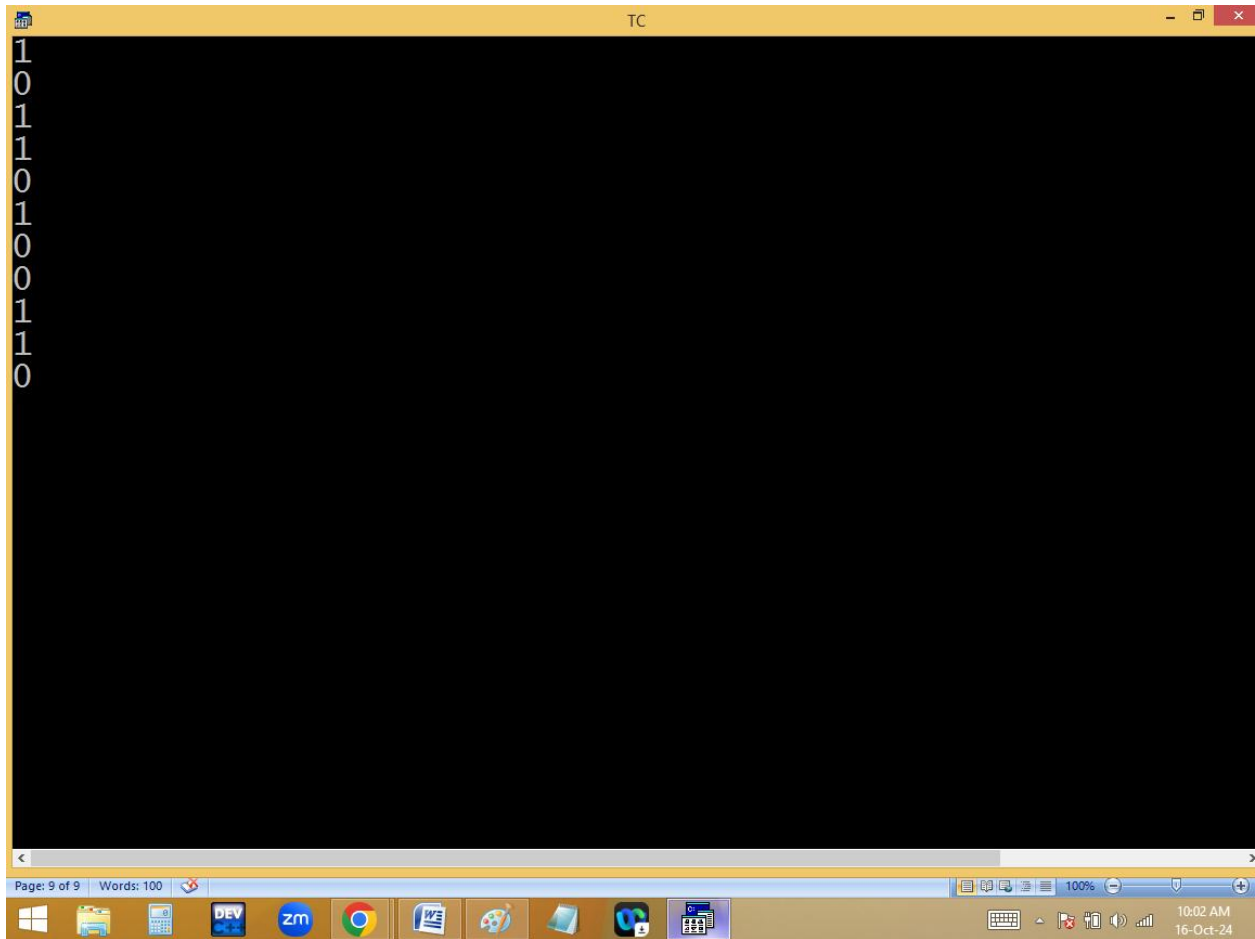
They are used to compare two values or expressions. If the relation is true always it return 1. If the relation is false then it return 0.

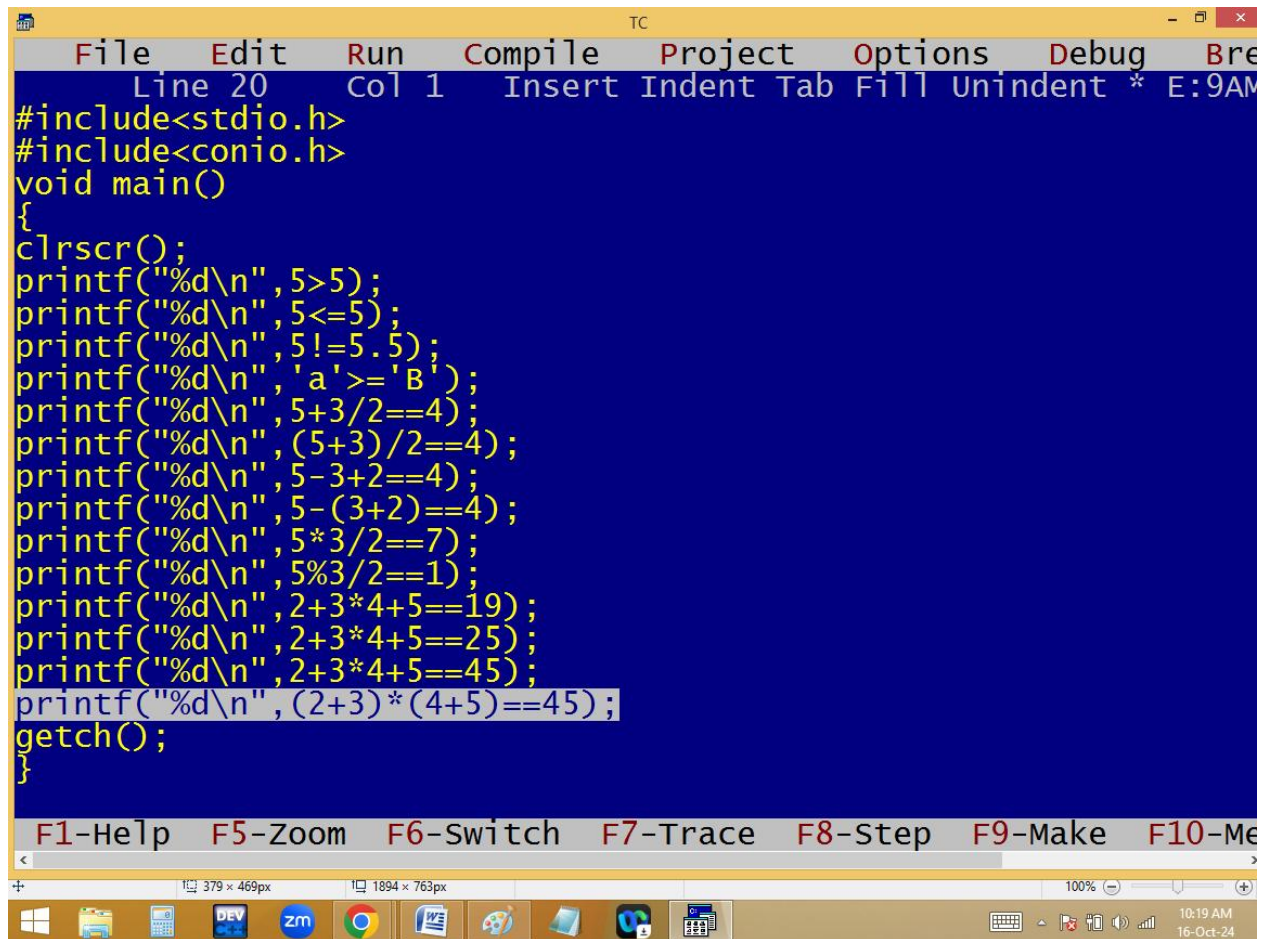


```
TC
File Edit Run Compile Project Options Debug Bre
Line 16 Col 23 Insert Indent Tab Fill Unindent * E:9AM
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n", 5==5);
printf("%d\n", 5==3);
printf("%d\n", 5==5.0);
printf("%d\n", .5==0.50);
printf("%d\n", 5.5==5.05);
printf("%d\n", 'a'=='a');
printf("%d\n", "a"=="a");
printf("%d\n", 'a'==65);
printf("%d\n", 'a'==97);
printf("%d\n", 'a'=='A'+32);
printf("%d\n", 'a'=="a");
getch();
}
```

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

Page: 8 of 9 Words: 100 100% 10:02 AM 16-Oct-24

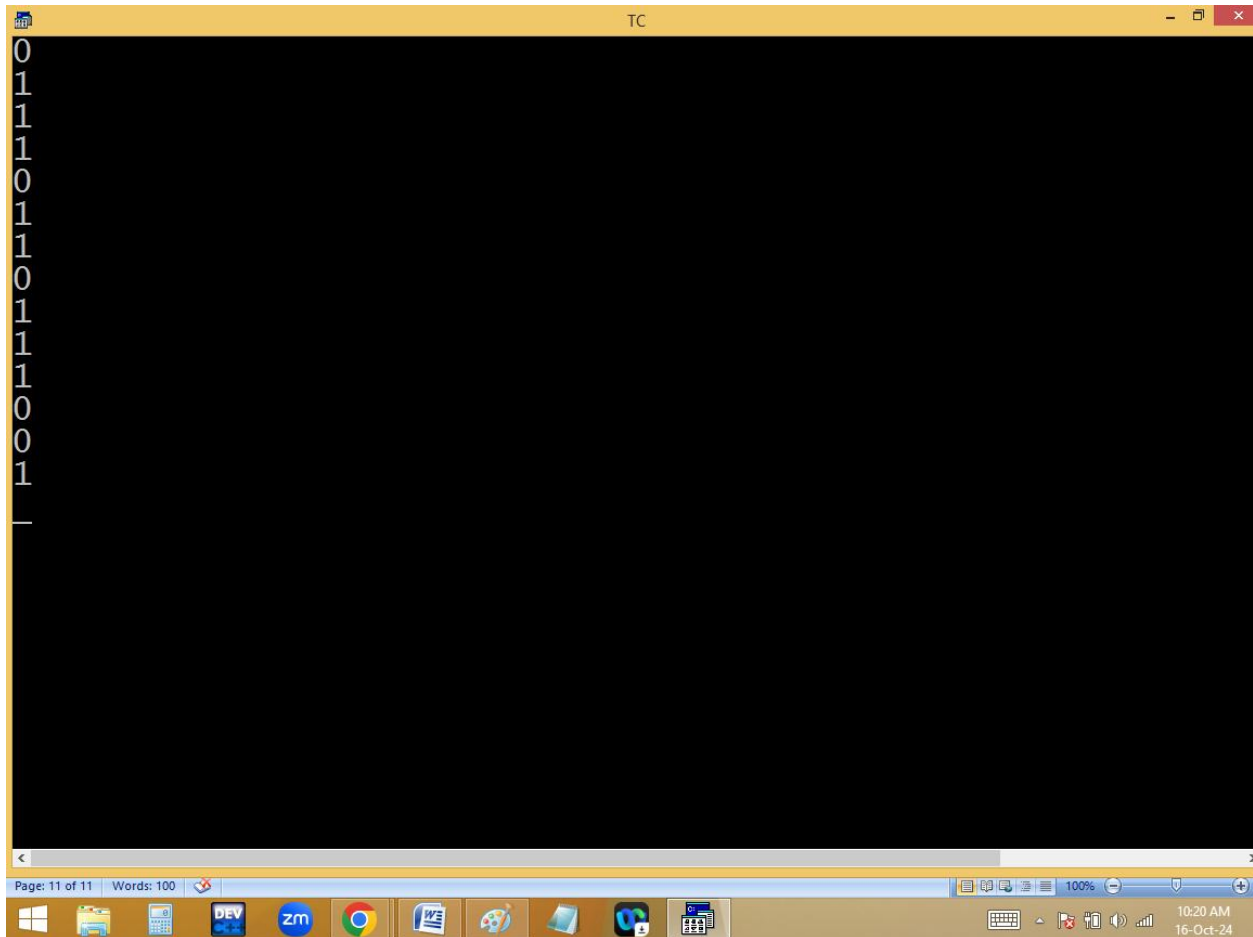




The image shows a screenshot of the Turbo C++ (TC) IDE. The window title is "TC". The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Breakpoint". The status bar at the top indicates "Line 20", "Col 1", and "Insert Indent Tab Fill Unindent \* E:9AM". The main editing area has a blue background and contains the following C code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n",5>5);
printf("%d\n",5<=5);
printf("%d\n",5!=5.5);
printf("%d\n",'a'>='B');
printf("%d\n",5+3/2==4);
printf("%d\n",(5+3)/2==4);
printf("%d\n",5-3+2==4);
printf("%d\n",5-(3+2)==4);
printf("%d\n",5*3/2==7);
printf("%d\n",5%3/2==1);
printf("%d\n",2+3*4+5==19);
printf("%d\n",2+3*4+5==25);
printf("%d\n",2+3*4+5==45);
printf("%d\n",(2+3)*(4+5)==45);
getch();
}
```

The line `printf("%d\n",(2+3)*(4+5)==45);` is highlighted in light blue. Below the code, 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 the cursor position "379 x 469px", the window size "1894 x 763px", a zoom level of "100%", and the system clock "10:19 AM 16-Oct-24". The Windows taskbar at the very bottom includes icons for the Start menu, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and other background applications.



## Operator precedence / Operator priority

(ASSOCIATION OF OPERATORS)

1. ()
2. +, -, ! (sign operators, unary operators)
3. ++, -- (pre increment & decrement)
4. \*, /, %

5. +, - (Binary)
6. ==, !=
7. &&
8. ||
9. ?: (ternary operator)
10. =
11. ++, -- ( Post increment & decrement )
12. , (comma)

### Logical operators:

- 1.&& - logical and
- 2.|| - logical or
- 3.! – logical not

**Note:** In C other than 0 anything is 1 i.e. true. 0 means false.

### Truth tables:

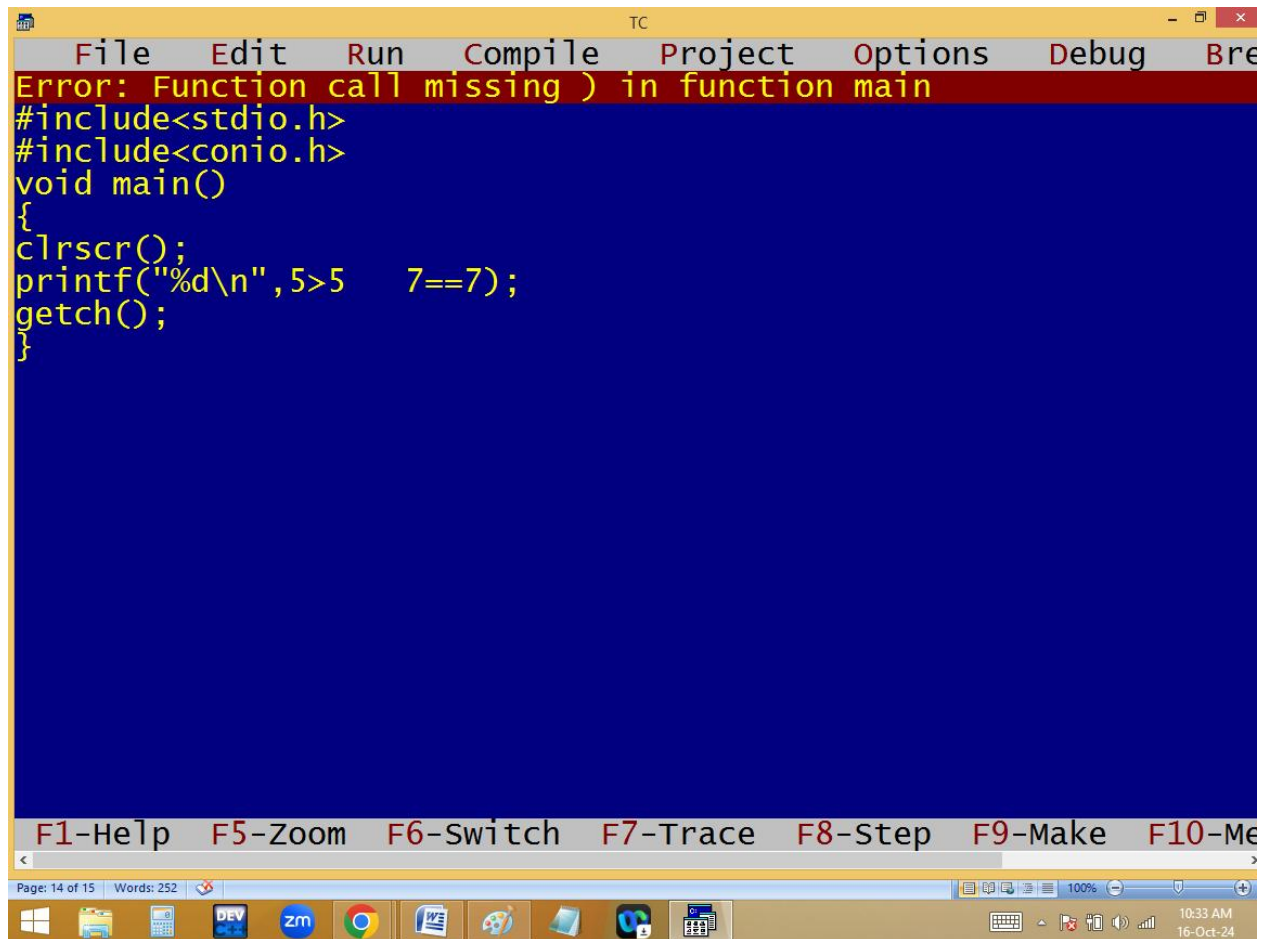
Operator	Expression1	Expression2	Result
&&	1	1	1
	1	0	0
	0	1	0
	0	0	0
	1	1	1
	1	0	1
	0	1	1
	0	0	0

&& , || used to combine two or more expressions into a single expression.

! operator used for negation. i.e.

! true means false.

! false means true.

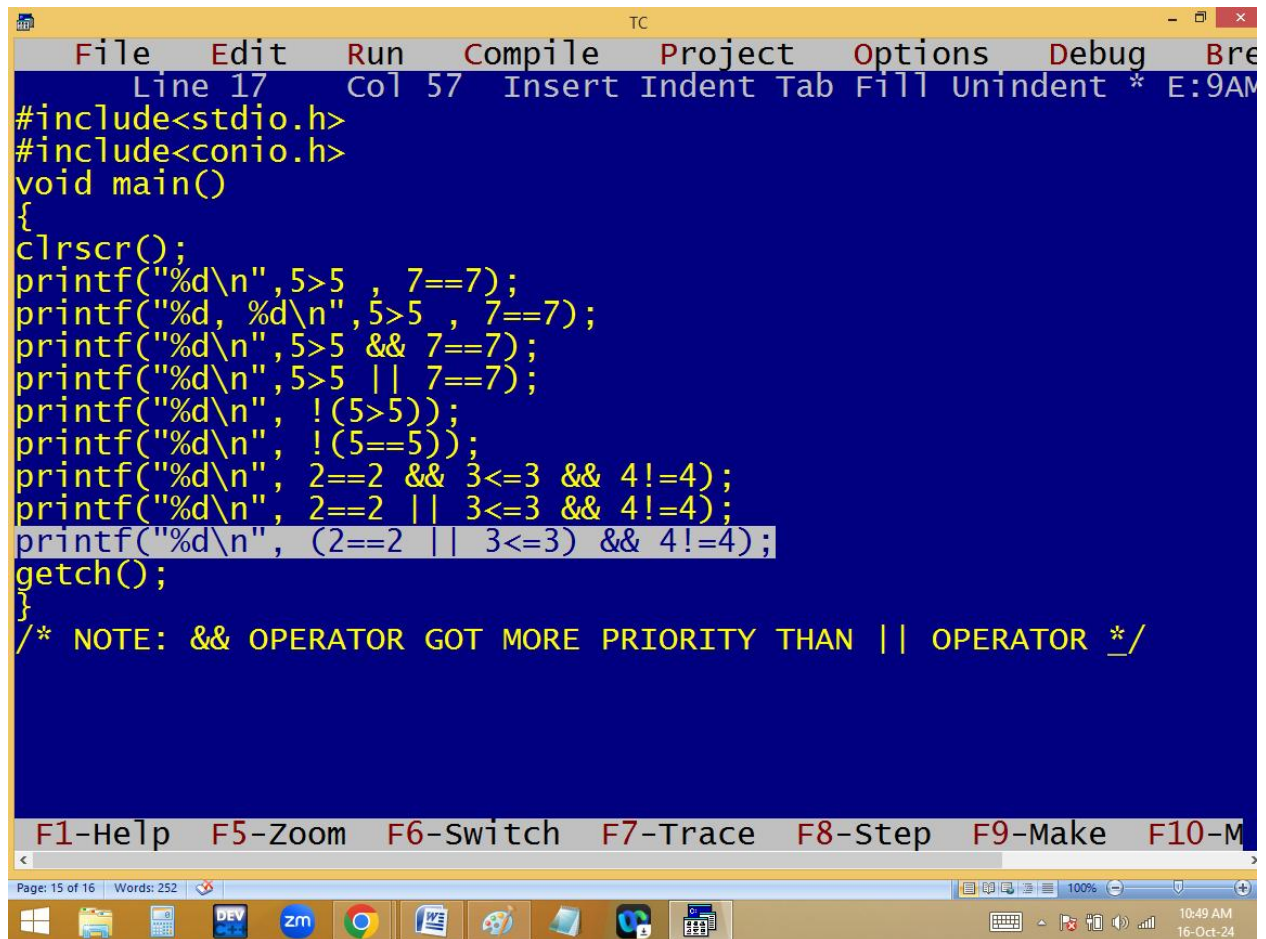


The image shows a screenshot of the Turbo C++ (TC) IDE. The title bar at the top reads "TC". The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Breakpoint". A red error message banner at the top states: "Error: Function call missing ) in function main". The main editing area has a blue background and contains the following C code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n",5>5    7==7);
getch();
}
```

Below the code editor, a status bar shows "Page: 14 of 15" and "Words: 252". At the bottom, a Windows taskbar is visible with icons for Windows, File Explorer, Calculator, DEV C++, Zoom, Google Chrome, Word, Paint, and other applications. The system clock in the bottom right corner shows "10:33 AM" and "16-Oct-24".

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



```
TC
File Edit Run Compile Project Options Debug Break
Line 17 Col 57 Insert Indent Tab Fill Unindent * E:9AM
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n",5>5 , 7==7);
printf("%d, %d\n",5>5 , 7==7);
printf("%d\n",5>5 && 7==7);
printf("%d\n",5>5 || 7==7);
printf("%d\n", !(5>5));
printf("%d\n", !(5==5));
printf("%d\n", 2==2 && 3<=3 && 4!=4);
printf("%d\n", 2==2 || 3<=3 && 4!=4);
printf("%d\n", (2==2 || 3<=3) && 4!=4);
getch();
}
/* NOTE: && OPERATOR GOT MORE PRIORITY THAN || OPERATOR */

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-M
Page: 15 of 16 Words: 252
10:49 AM
16-Oct-24
```



