

```
File Edit Run Compile Project Options Debug Break/watch
Line 1 Col 1 Insert Indent Tab Fill Unindent E:9AM.C
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
void main()
{
abc:
textcolor(random(16)); /* 0-15 */
textbackground(random(16));
printf("Kishore");
goto abc;
}
```

If:

if:

It is a decision making statement.

It is a keyword is used to check the given condition / expression is true or false.

Note: In c other than 0 any thing is 1 i.e. true.

C provides 4 type of if statements.

1. Simple if
2. If..else
3. If..else if / ladder if
4. Nested if

Simple if:

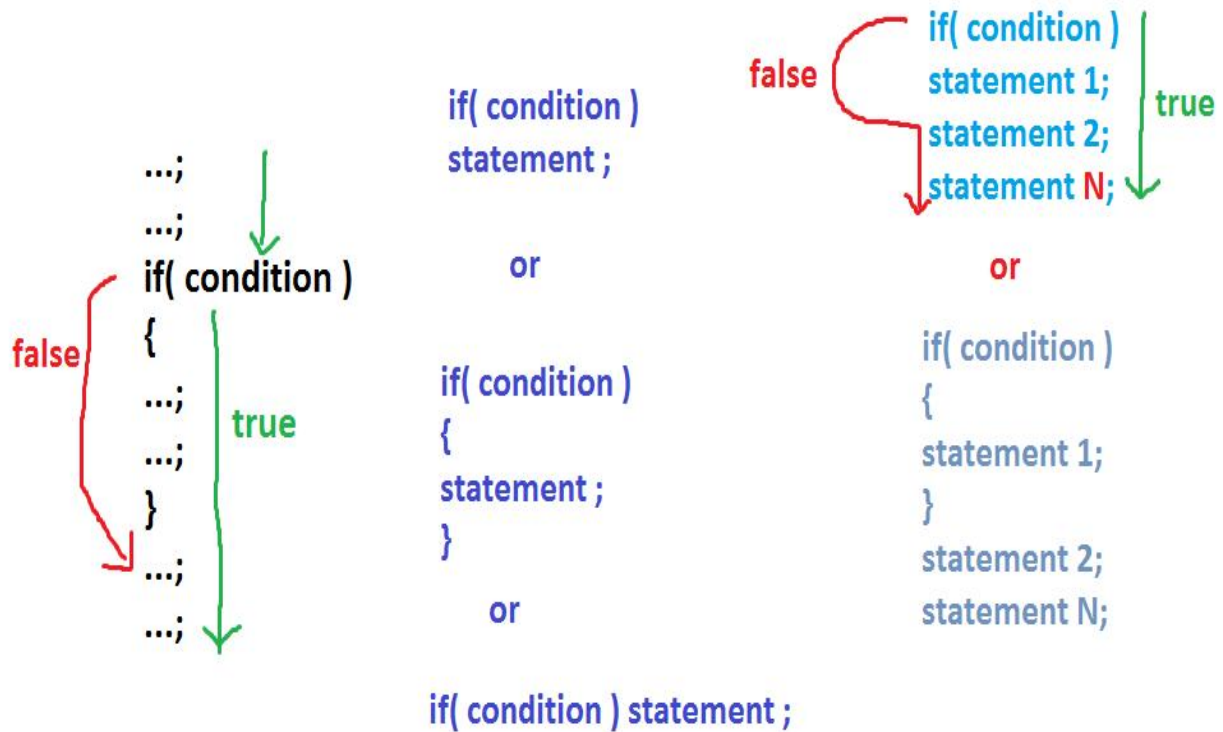
When the program is having only one option / condition then go for simple if.

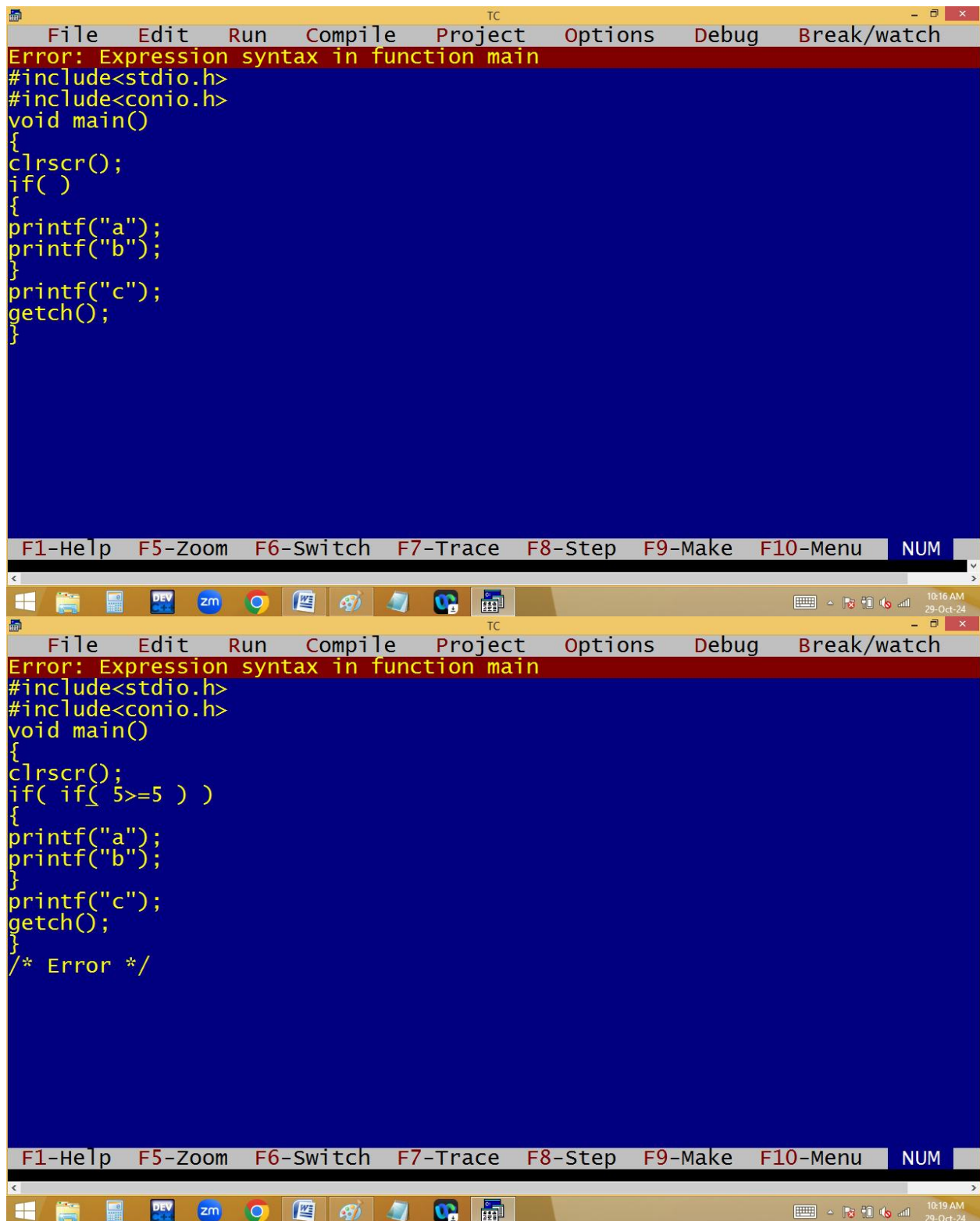
if condition true the statements in if block { } are executed and later outside statements also executed.

If condition false only the outside statements are executed.

Note: When single statements is there { } are optional.

Syntax:





The image displays two instances of the Turbo C++ (TC) IDE, stacked vertically. Both windows show a C program with compilation errors.

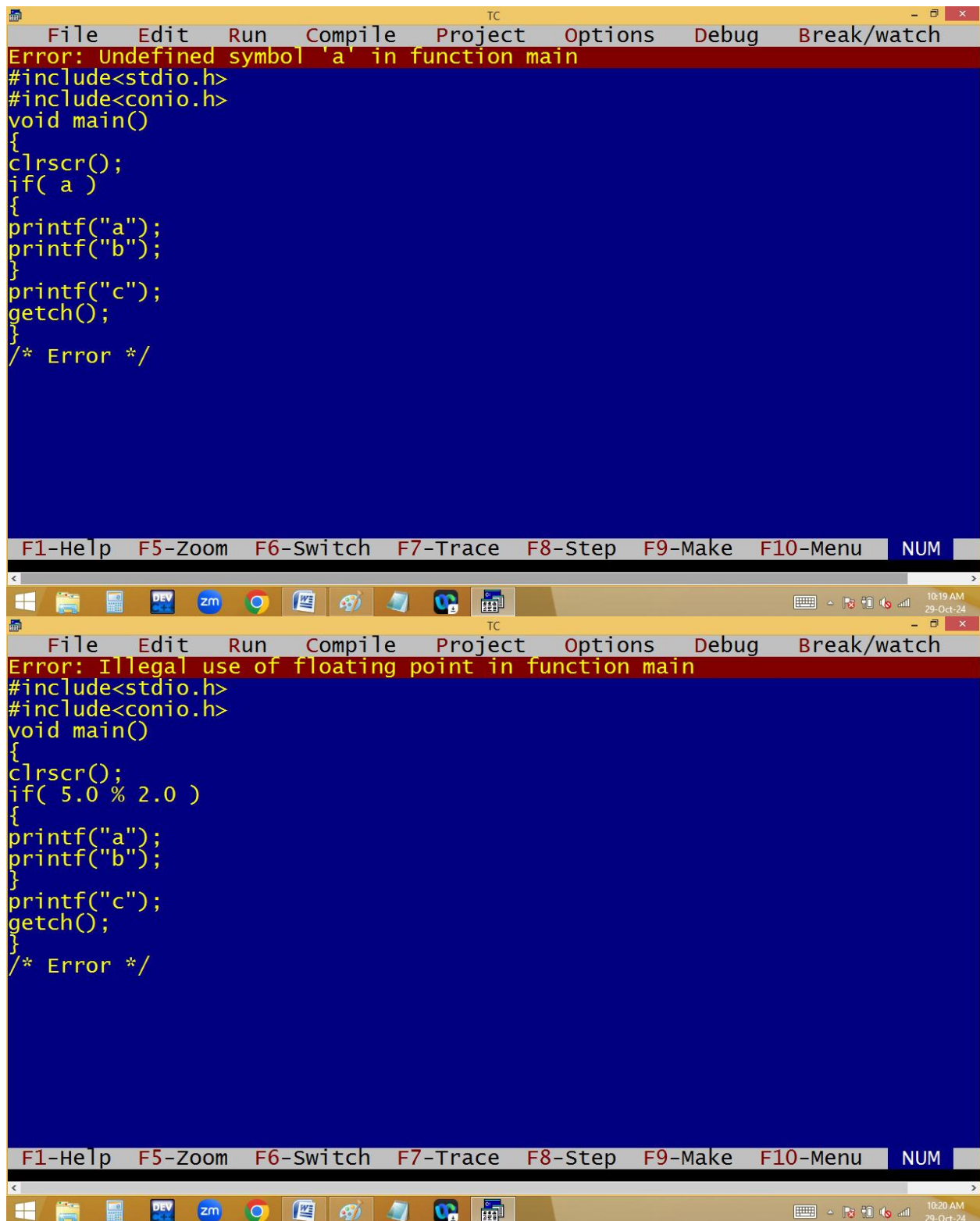
Top Window:

```
File Edit Run Compile Project Options Debug Break/watch
Error: Expression syntax in function main
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
```

Bottom Window:

```
File Edit Run Compile Project Options Debug Break/watch
Error: Expression syntax in function main
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( if( 5>=5 ) )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* Error */
```

Both windows have a menu bar with 'File', 'Edit', 'Run', 'Compile', 'Project', 'Options', 'Debug', and 'Break/watch'. The bottom window's status bar shows the time as 10:16 AM and 10:19 AM on 29-Oct-24.



```
TC
File Edit Run Compile Project Options Debug Break/watch
Error: Undefined symbol 'a' in function main
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( a )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* Error */

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

TC
File Edit Run Compile Project Options Debug Break/watch
Error: Illegal use of floating point in function main
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5.0 % 2.0 )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* Error */

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu NUM
```


The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays a compilation error: "Error: Undefined symbol 'true' in function main". The code in the editor is as follows:

```
File Edit Run Compile Project Options Debug Break/watch
Error: Undefined symbol 'true' in function main
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( true )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* Error */
```

The bottom screenshot shows the same code after correction. The error message at the top now reads: "Line 15 Col 5 Insert Indent Tab Fill Unindent * E:9AM.C". The corrected code is:

```
File Edit Run Compile Project Options Debug Break/watch
Line 15 Col 5 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int true = 0;
clrscr();
if( true )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* c_*/
```

Both screenshots show the TC menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a function key bar (F1-Help, F5-Zoom, F6-Switch, F7-Trace, F8-Step, F9-Make, F10-Menu, NUM). The Windows taskbar at the bottom includes icons for various applications and the system clock showing 10:21 AM and 10:22 AM on 29-Oct-24.

TC

File Edit Run Compile Project Options Debug Break/watch

Line 5 Col 16 Insert Indent Tab Fill Unindent * E:9AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
int true = 0.1;
clrscr();
if( true )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* c */
```

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

TC

File Edit Run Compile Project Options Debug Break/watch

Line 15 Col 6 Insert Indent Tab Fill Unindent * E:9AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
float true = 0.1;
clrscr();
if( true )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* abc */
```

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

TC

File Edit Run Compile Project Options Debug Break/watch

Line 6 Col 16 Insert Indent Tab Fill Unindent * E:9AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
int true = 'x';
clrscr();
if( true )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* abc */
```

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

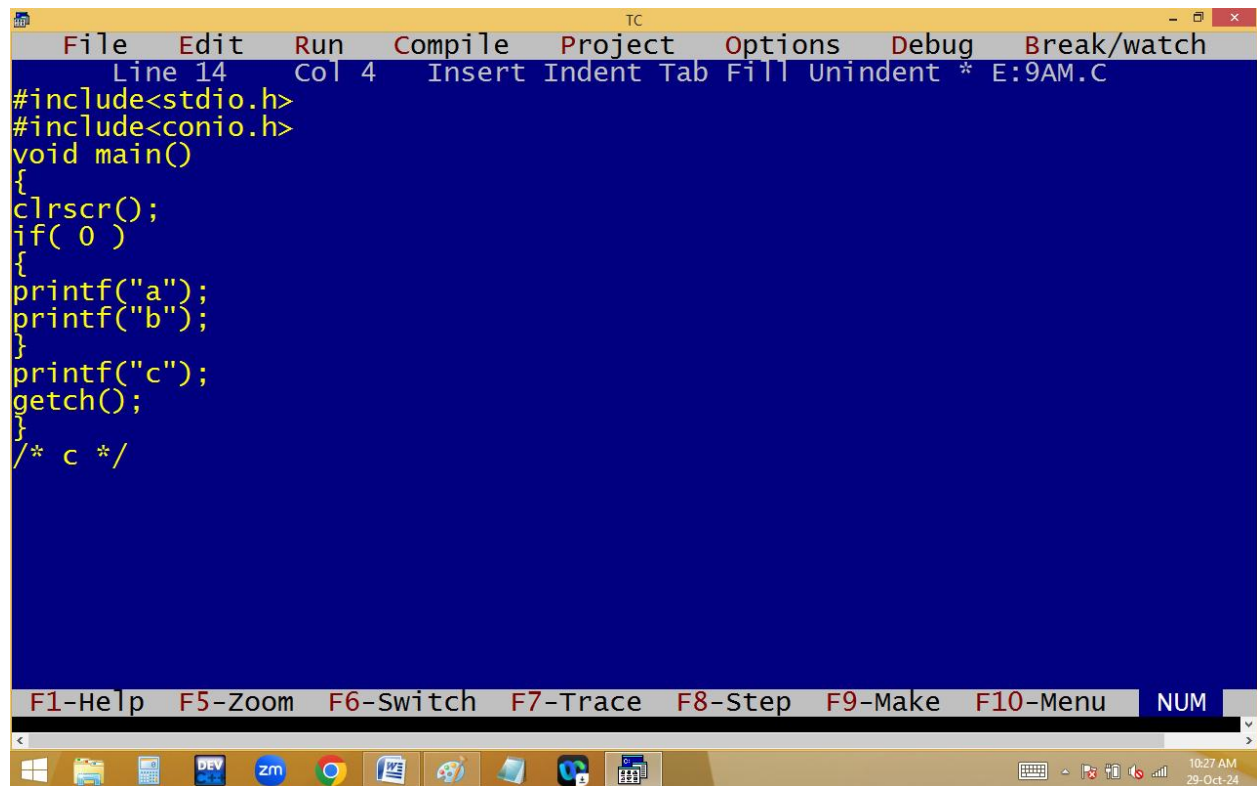
TC

File Edit Run Compile Project Options Debug Break/watch

Line 7 Col 8 Insert Indent Tab Fill Unindent * E:9AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( '0' )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* abc */
```

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



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 4 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 0 )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* c */

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu NUM
```

10:27 AM
29-Oct-24

The image displays two instances of the Turbo C++ (TC) IDE. The top window shows a C program with a syntax error. The code is as follows:

```
File Edit Run Compile Project Options Debug Break/watch
Error: Division by zero in function main
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5%0 )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* Error */
```

The error message "Error: Division by zero in function main" is displayed at the top. The code contains a division by zero in the condition of the if statement: `if(5%0)`.

The bottom window shows the same C program, but with a corrected condition. The code is as follows:

```
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 5 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 'a'/'b' )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
/* c_*/
```

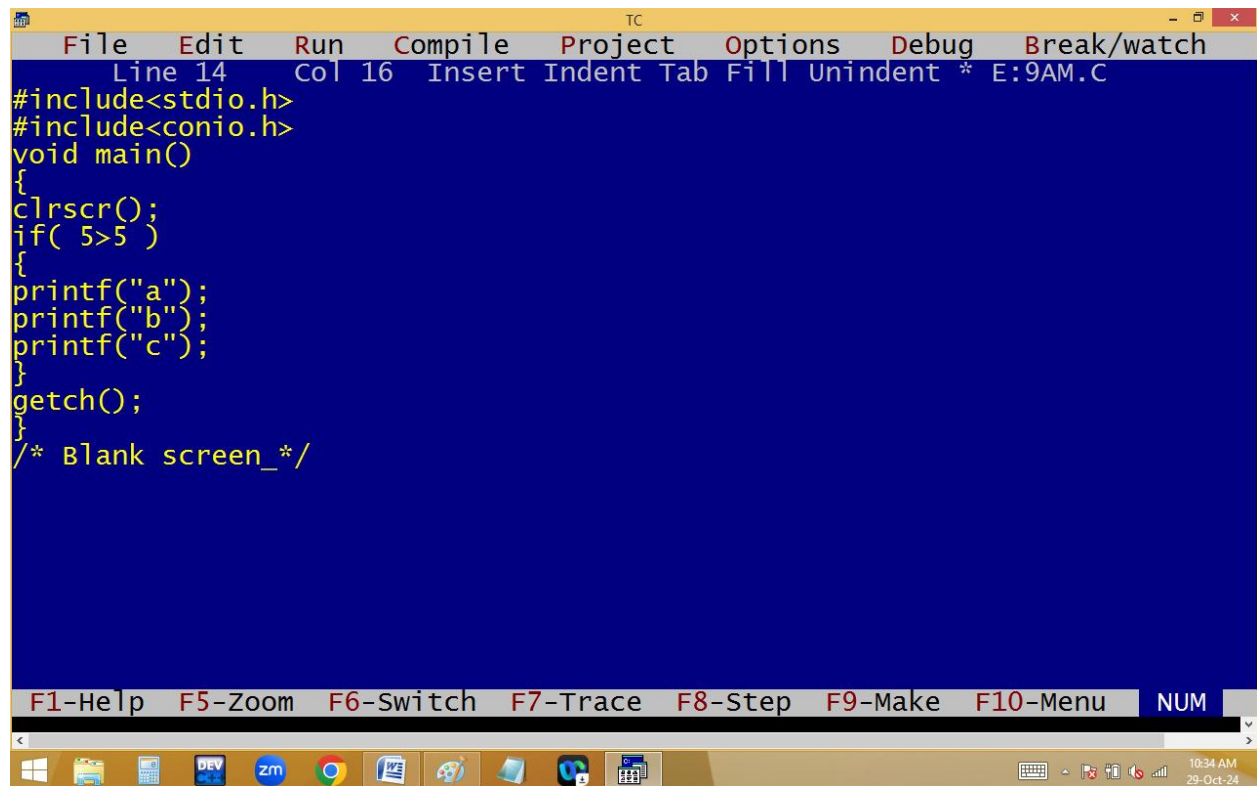
The code in the bottom window has been corrected to `if('a'/'b')`, which is a valid C expression. The status bar at the bottom of the window shows "Line 14 Col 5 Insert Indent Tab Fill Unindent * E:9AM.C".

The image displays two instances of the Turbo C++ (TC) IDE, stacked vertically. Both windows show a C program with the following structure:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    clrscr();
    if( 5/6.0 )
    {
        printf("a");
        printf("b");
    }
    printf("c");
    getch();
}
/* abc */
```

The top window's status bar indicates "Line 14 Col 6". The bottom window's status bar indicates "Line 15 Col 11". The code in the bottom window is identical to the top one, but the condition in the if statement is `5>5`.

Both IDE windows feature a menu bar with "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Break/watch". A toolbar with function key shortcuts (F1-Help, F5-Zoom, F6-Switch, F7-Trace, F8-Step, F9-Make, F10-Menu, NUM) is located below the menu bar. The Windows taskbar at the bottom shows the time as 10:30 AM and 10:34 AM for the top and bottom windows respectively, on the date 29-Oct-24.



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 16 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5>5 )
{
printf("a");
printf("b");
printf("c");
}
getch();
}
/* Blank screen_*/

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu NUM
```

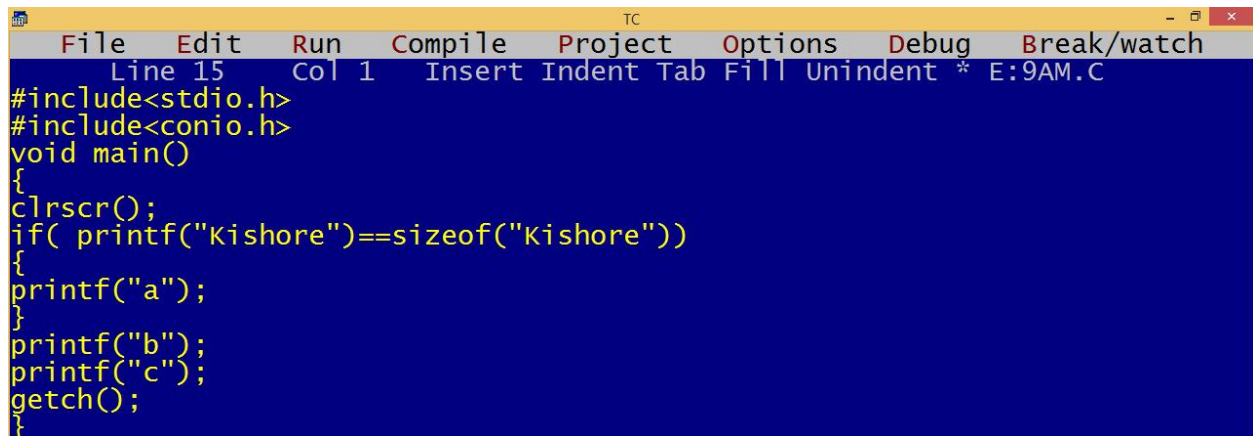
10:34 AM
29-Oct-24

```
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 6 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5>5 )
printf("a");
printf("b");
printf("c");
getch();
}
/* bc */

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu NUM
```

```
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 2 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5>5 )
{
printf("a");
}
printf("b");
printf("c");
getch();
}
/* bc */

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu NUM
```

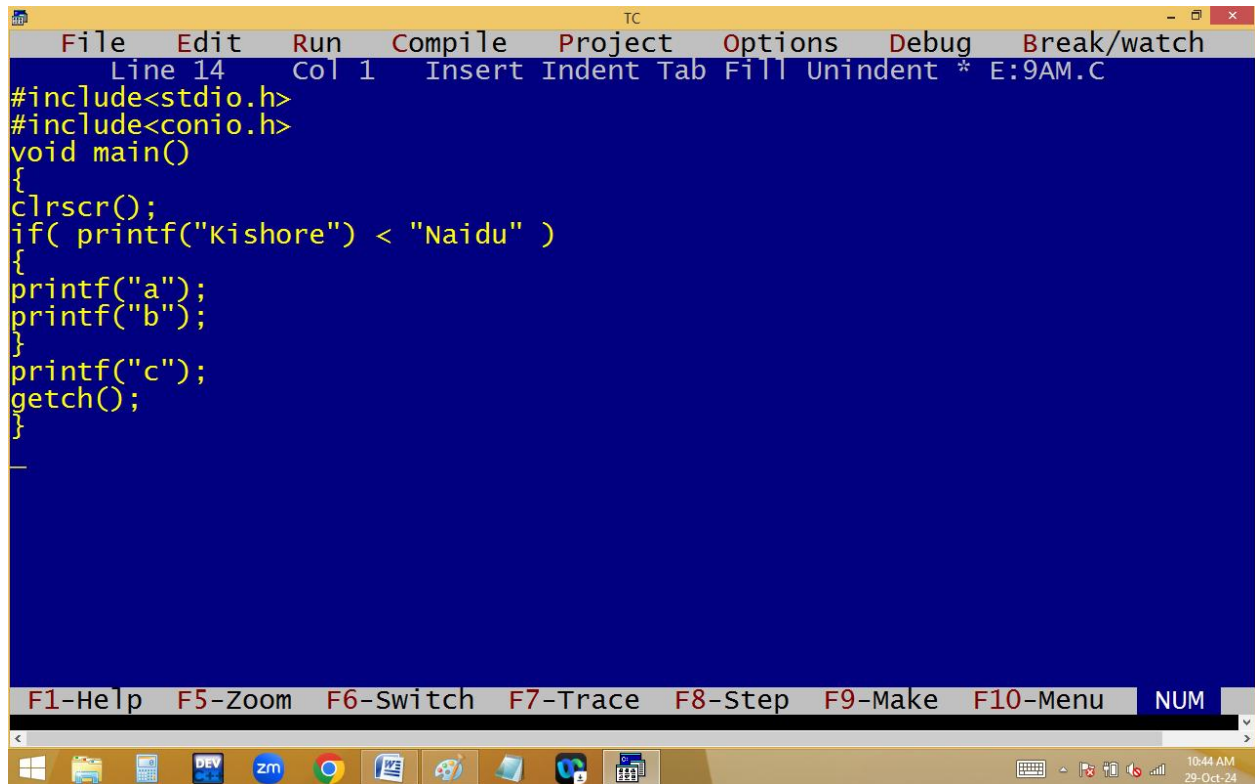



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 15 Col 1 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( printf("Kishore")==sizeof("Kishore"))
{
printf("a");
}
printf("b");
printf("c");
getch();
}
```

Output: Kishorebc

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 1 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( printf("Kishore") < printf("Naidu"))
{
printf("a");
printf("b");
}
printf("c");
getch();
}

F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu NUM
KishoreNaiduc_
TC
10:42 AM
29-Oct-24
```



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 1 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( printf("Kishore") < "Naidu" )
{
printf("a");
printf("b");
}
printf("c");
getch();
}
```

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

10:44 AM 29-Oct-24

Print kishore without using ;

The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays a compilation error: "Error: Statement missing ; in function main". The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("Kishore"){_}
getch();
}
```

The bottom screenshot shows the same code after correction. The error has been resolved by adding a semicolon to the printf statement. The code is now:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if(printf("Kishore"))
{
}
getch();_
}
```

Below the code editor, a "Message" window displays the compilation and linking status:

```
•Compiling E:\TC\9AM.C:
Linking E:\TC\9AM.EXE:
```

The TC IDE interface includes a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch), a toolbar with function key shortcuts (F1-Help, F5-Zoom, F6-Switch, F7-Trace, F8-Step, F9-Make, F10-Menu, NUM), and a Windows taskbar at the bottom showing the time as 10:45 AM and 10:47 AM on 29-Oct-24.

