

The screenshot shows the Turbo C++ IDE interface. The menu bar at the top includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. Below the menu bar, the status bar indicates Line 1, Col 1, and the file name E:11AM.C. The main editing area has a blue background and contains the following C code:

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
void main()
{
start:
textcolor(random(16));
textbackground(random(16));
cprintf("KishorE");
goto start;
}
```

The Windows taskbar at the bottom shows various icons, including the Start button, Internet Explorer, File Explorer, Microsoft Word, and the system clock displaying 11:38 AM on 27-Jun-24.

if: It is a decision making statement.

It is used to check the given condition is true or false.

If condition true then only if allows to execute the statements in if block { }.

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

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

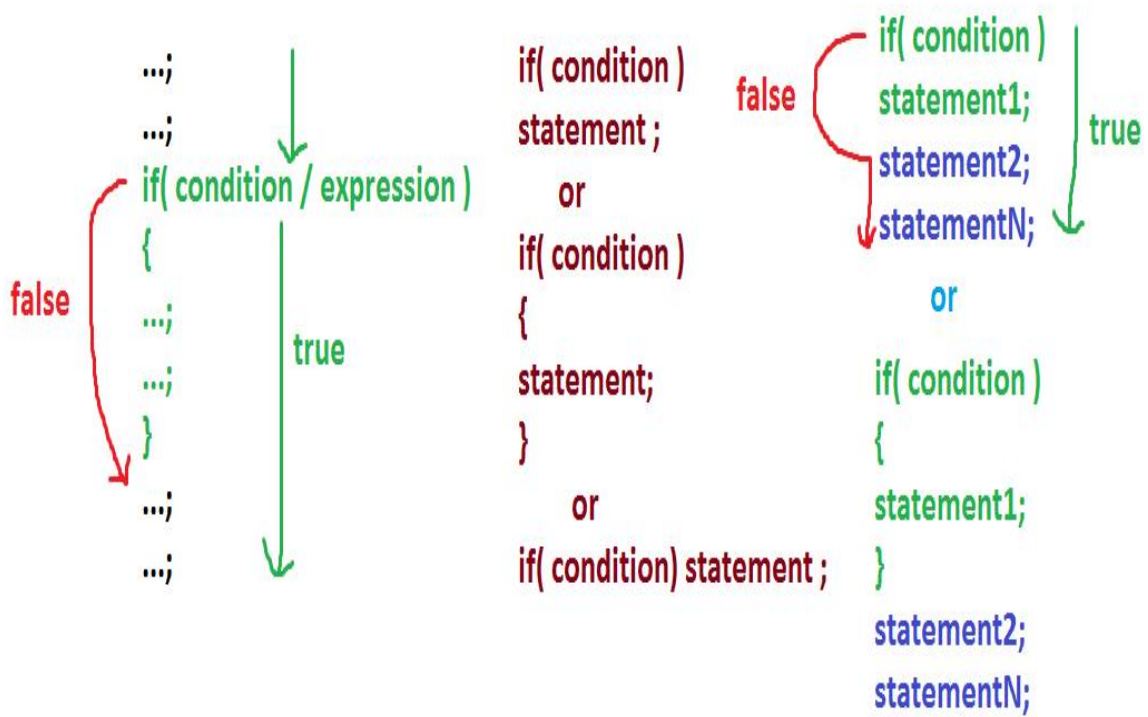
We are using 4 type of if conditions.

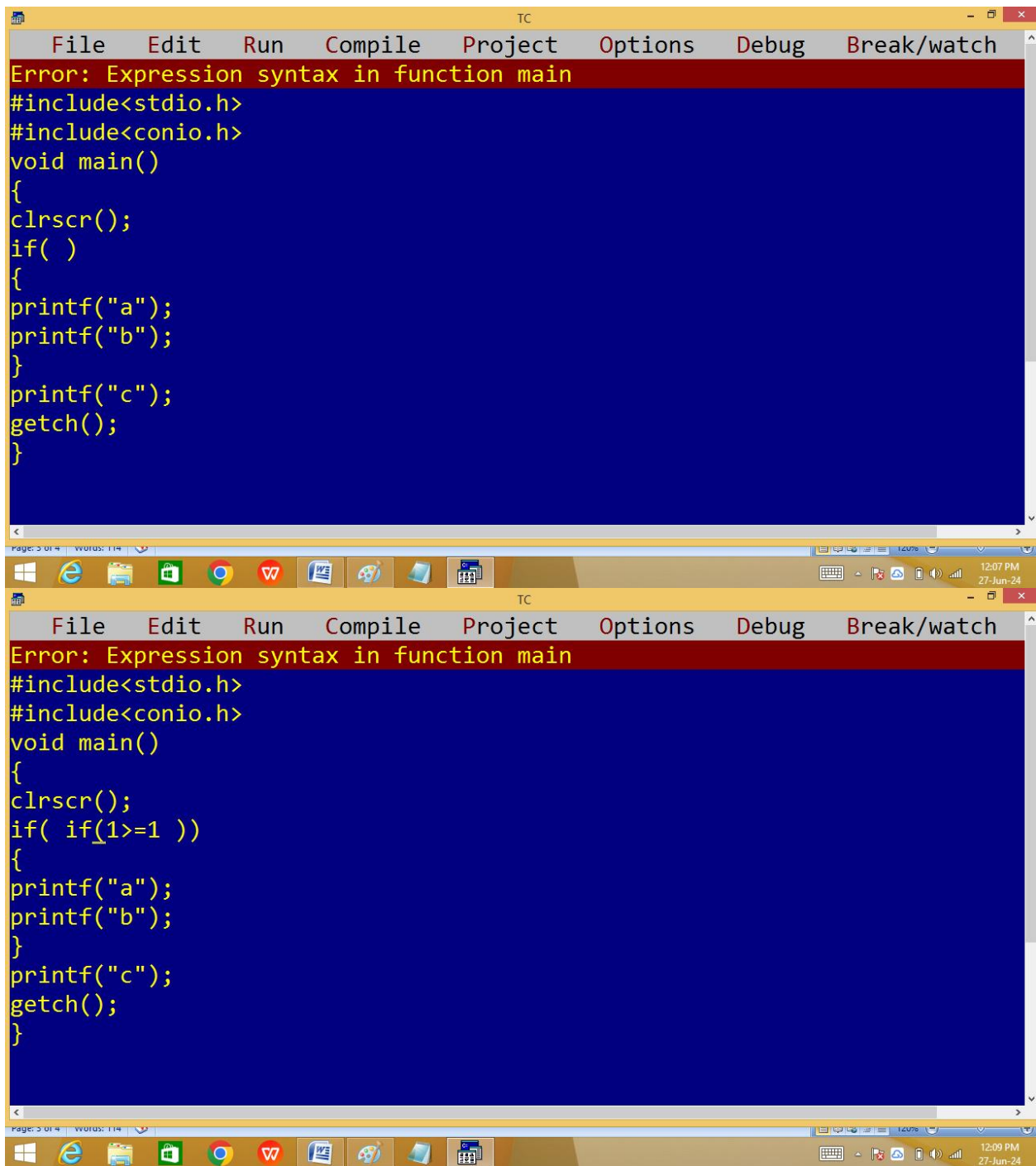
1. Simple if
2. If..else
3. If..else if ladder
4. Nested if

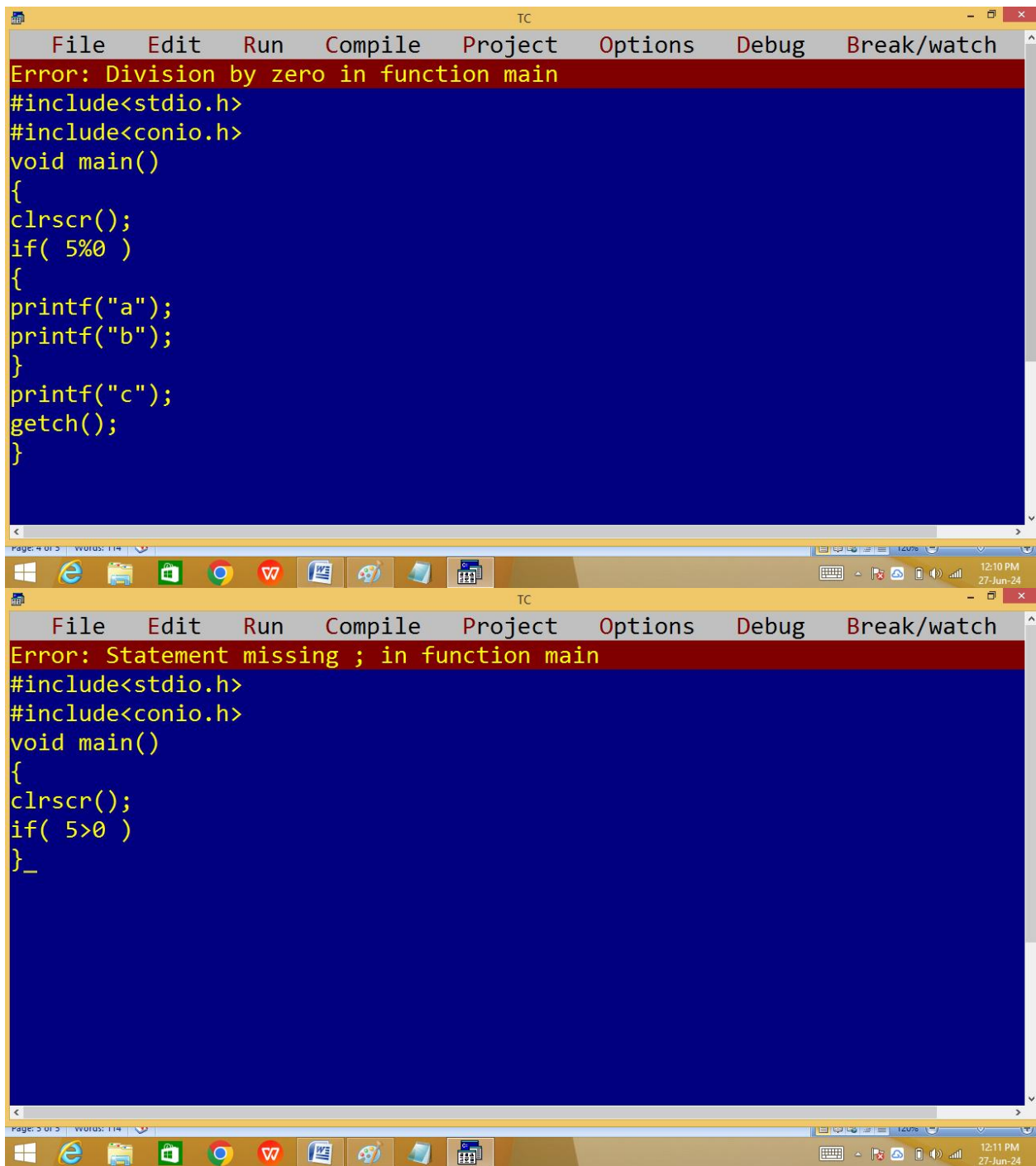
Simple if: when the program is having one option/condition then go for simple if.

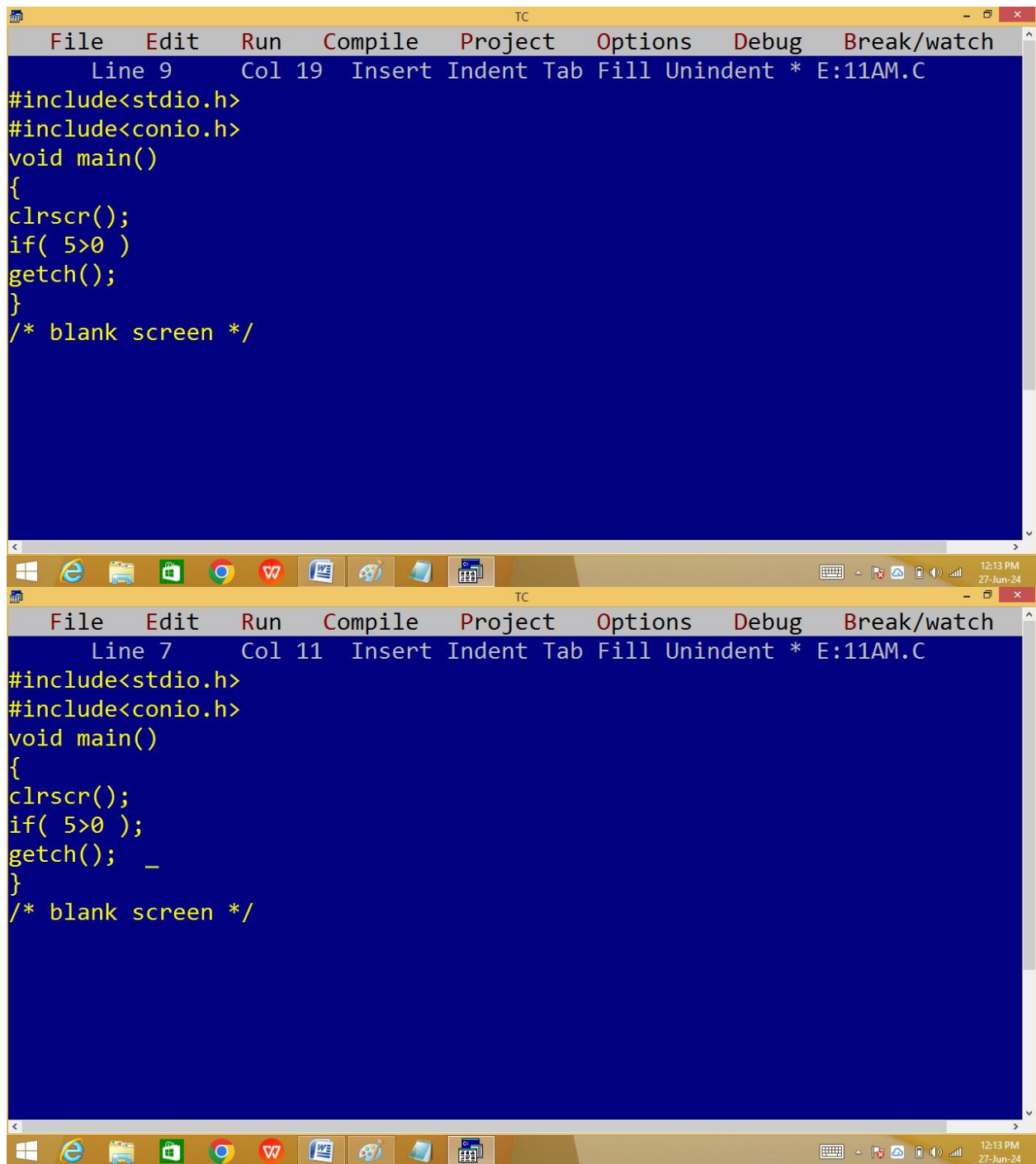
If condition true statements in if block { } are executed and later outside statements executed.

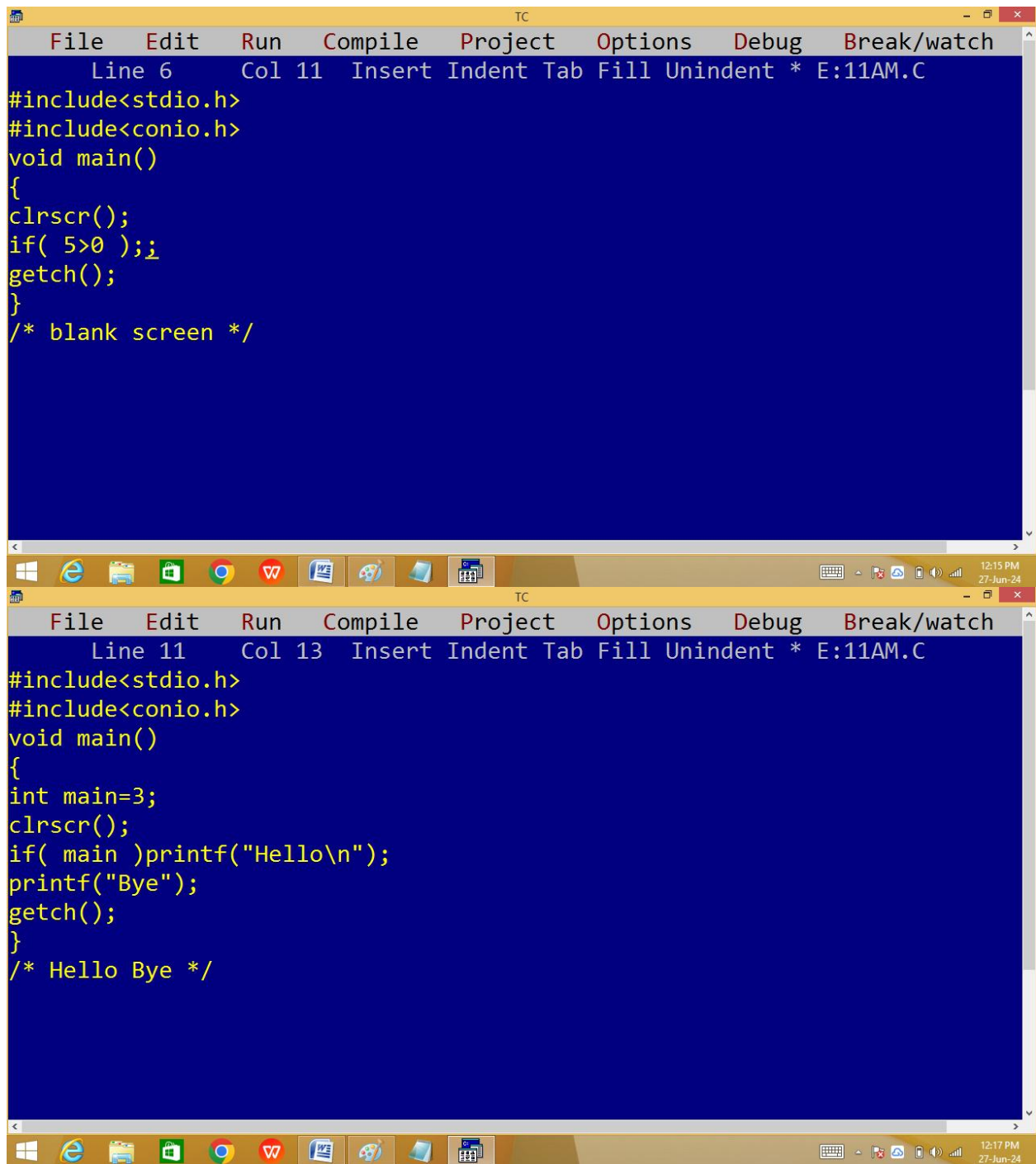
If condition false only the outside statements executed.











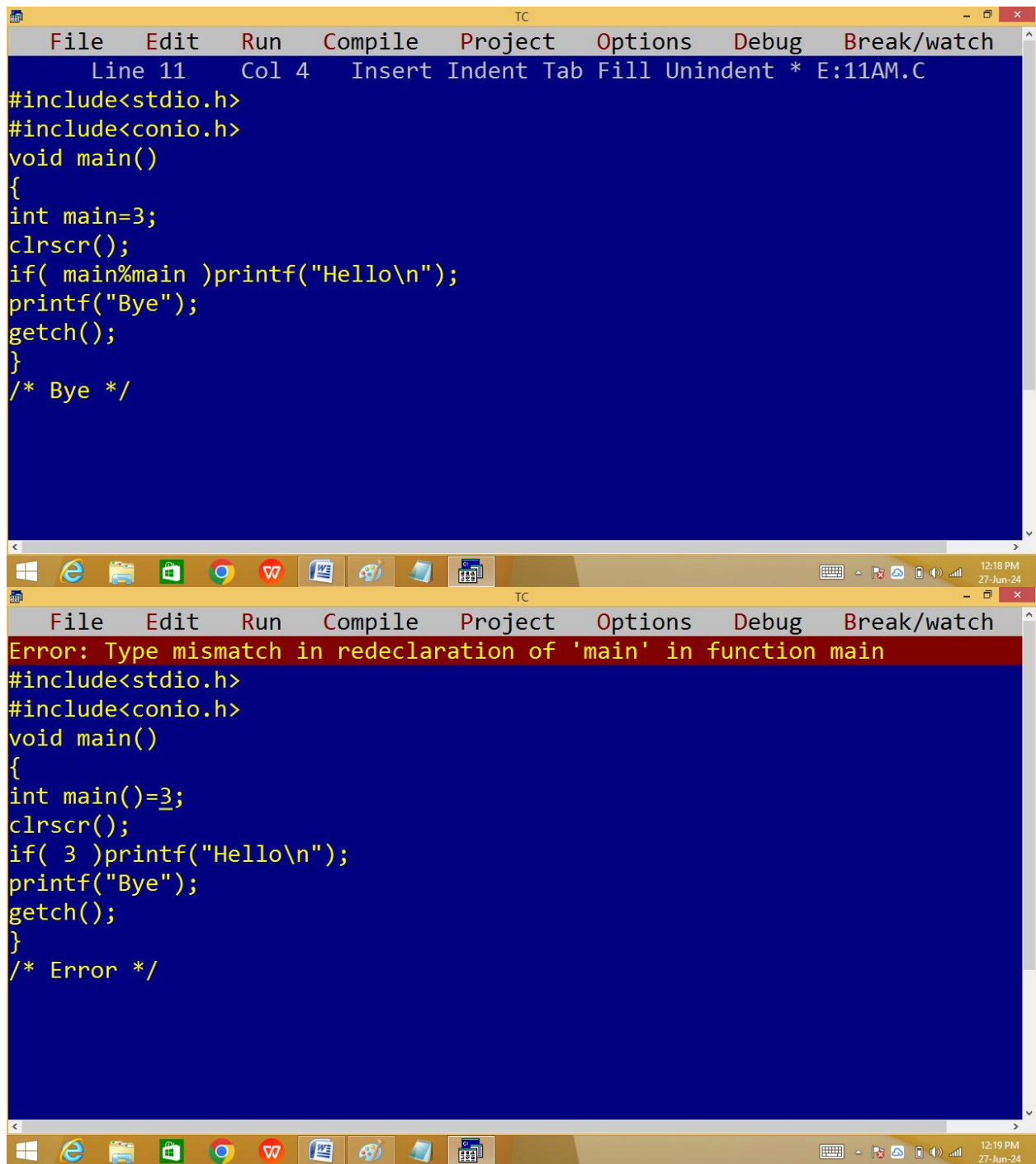
The image displays two instances of the Turbo C++ (TC) IDE, stacked vertically. Both windows have a yellow title bar with the text 'TC' and standard window controls. The menu bar includes 'File', 'Edit', 'Run', 'Compile', 'Project', 'Options', 'Debug', and 'Break/watch'. The status bar at the bottom of each window shows 'Line', 'Col', and 'Insert Indent Tab Fill Unindent * E:11AM.C'. The Windows taskbar is visible at the bottom of the screen, showing icons for various applications and the system clock.

The top window shows the following code:

```
Line 6      Col 11  Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5>0 );;
getch();
}
/* blank screen */
```

The bottom window shows the following code:

```
Line 11     Col 13  Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int main=3;
clrscr();
if( main )printf("Hello\n");
printf("Bye");
getch();
}
/* Hello Bye */
```



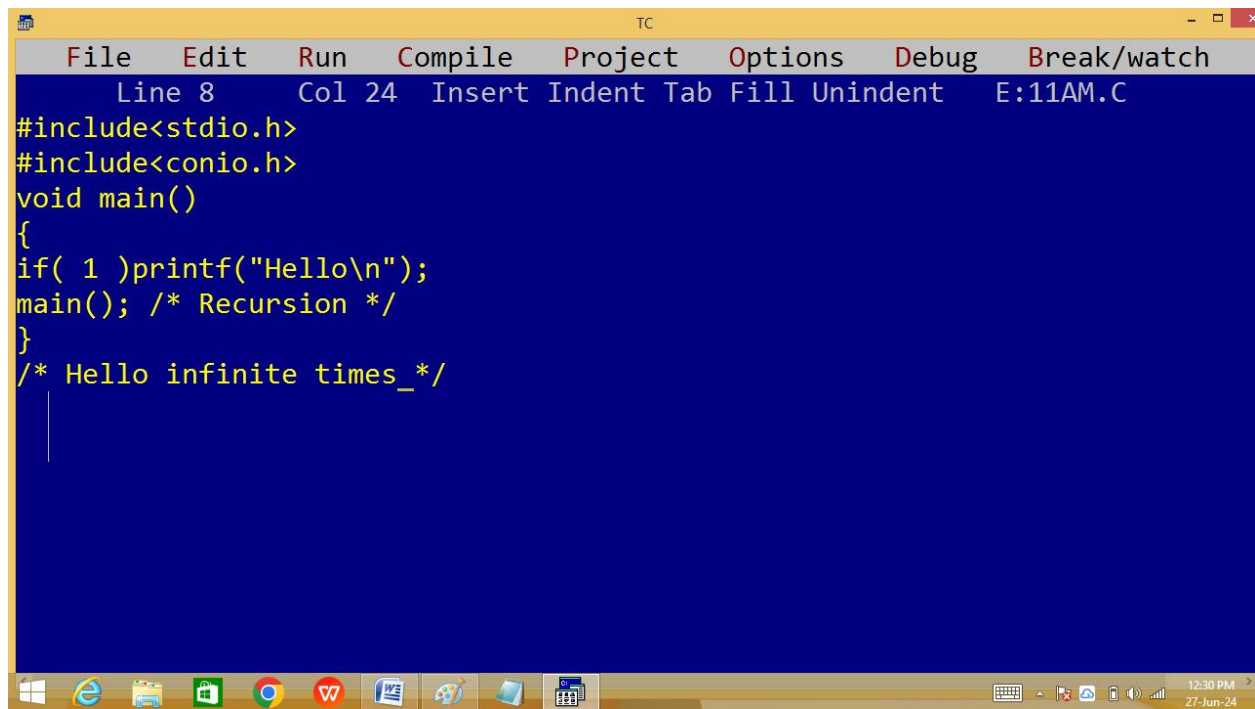
The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays a C program with the following code:

```
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 4 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int main=3;
clrscr();
if( main%main )printf("Hello\n");
printf("Bye");
getch();
}
/* Bye */
```

The bottom screenshot shows the same program with a modification that causes a compilation error. The code is:

```
File Edit Run Compile Project Options Debug Break/watch
Error: Type mismatch in redeclaration of 'main' in function main
#include<stdio.h>
#include<conio.h>
void main()
{
int main()=3;
clrscr();
if( 3 )printf("Hello\n");
printf("Bye");
getch();
}
/* Error */
```

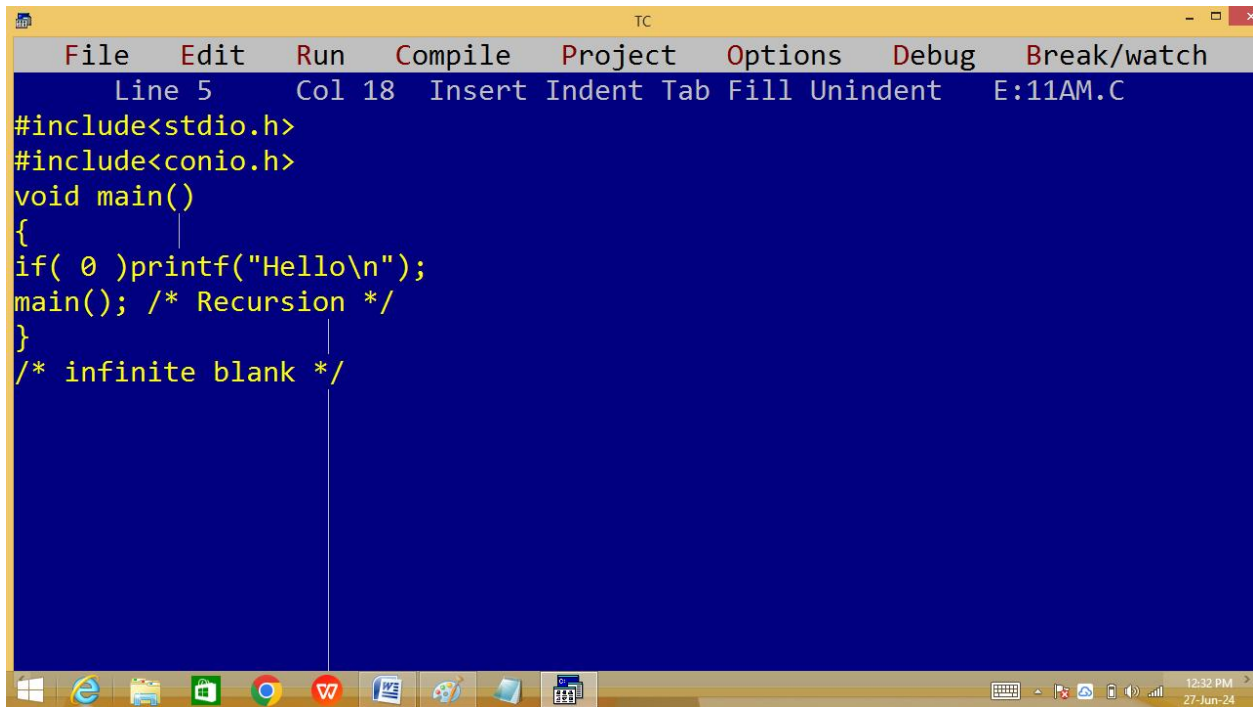
The error message "Error: Type mismatch in redeclaration of 'main' in function main" is highlighted in red. The taskbar at the bottom of both windows shows the time as 12:18 PM and 12:19 PM on 27-Jun-24.



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 "Break/watch". The status bar at the top indicates "Line 8", "Col 24", and "E:11AM.C". The main editing area has a dark blue background with yellow text. The code is as follows:

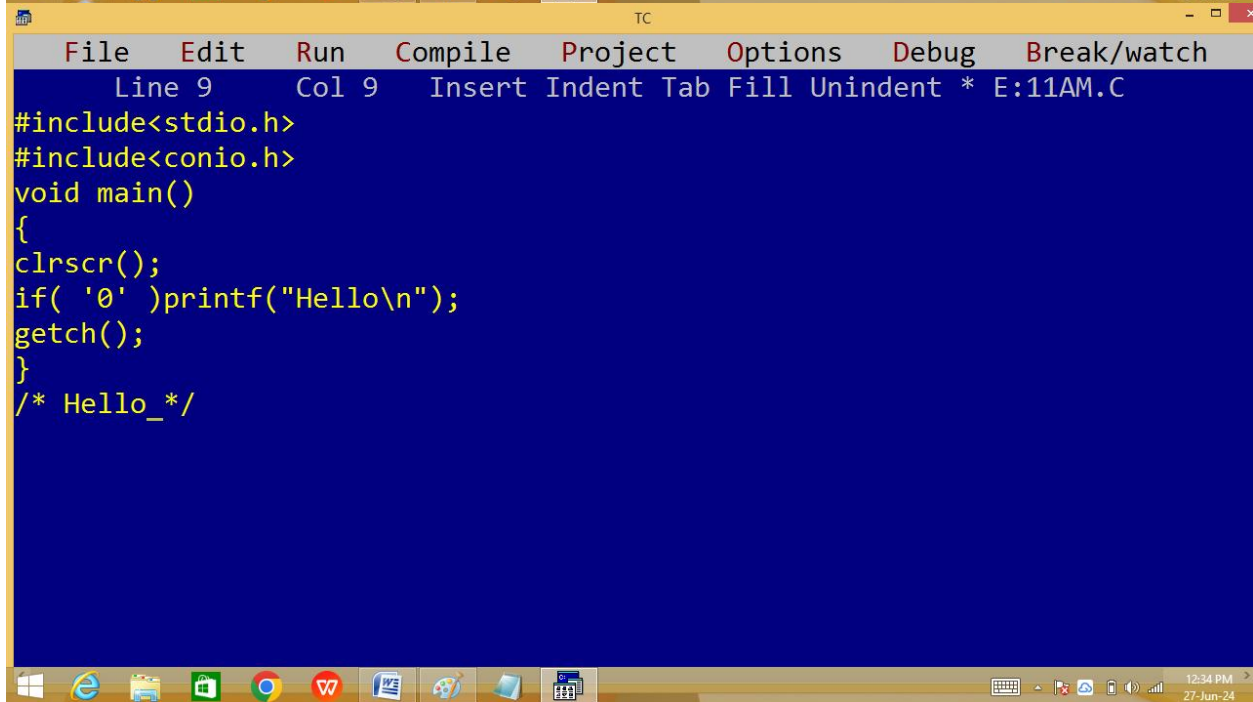
```
#include<stdio.h>
#include<conio.h>
void main()
{
if( 1 )printf("Hello\n");
main(); /* Recursion */
}
/* Hello infinite times_*/
```

The cursor is positioned at the end of the last line of code. The Windows taskbar is visible at the bottom, showing icons for various applications and the system clock indicating 12:30 PM on 27-Jun-24.



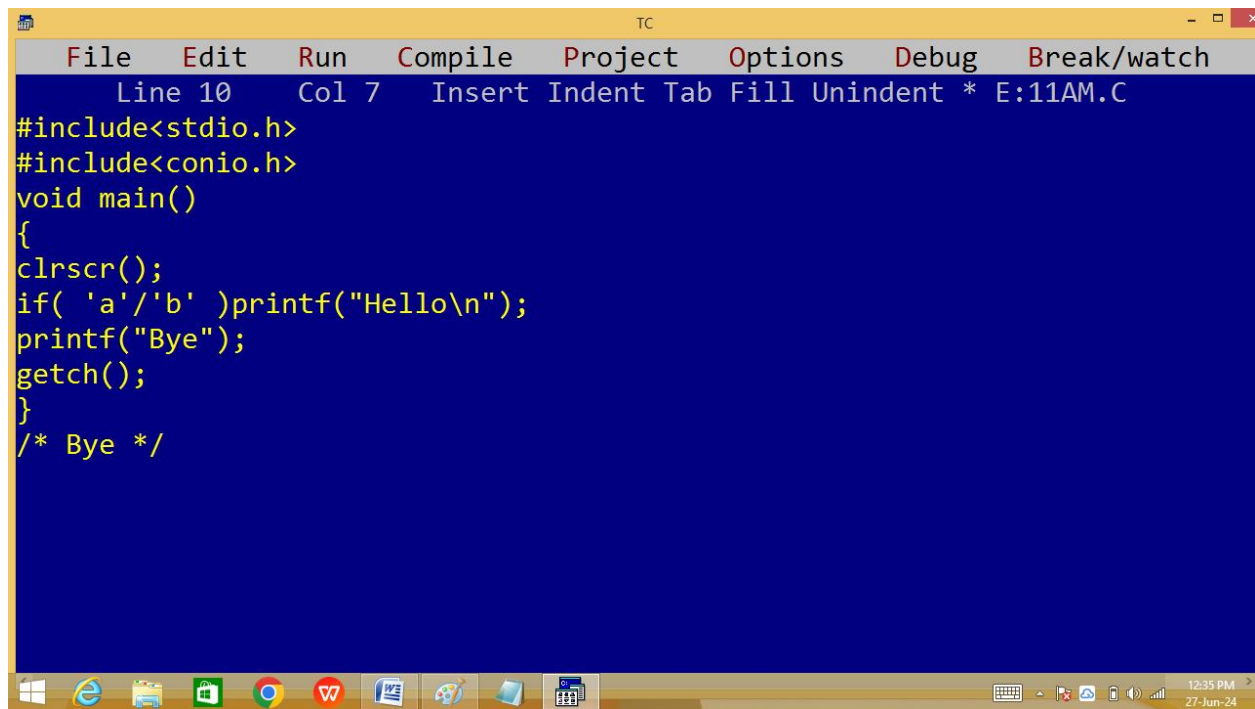
The screenshot shows the Turbo C++ IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 5, Col 18, Insert, Indent, Tab, Fill, Unindent, E:11AM.C). The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    if( 0 )printf("Hello\n");
    main(); /* Recursion */
}
/* infinite blank */
```



The screenshot shows the Turbo C++ IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 9, Col 9, Insert, Indent, Tab, Fill, Unindent, * E:11AM.C). The code in the editor is as follows:

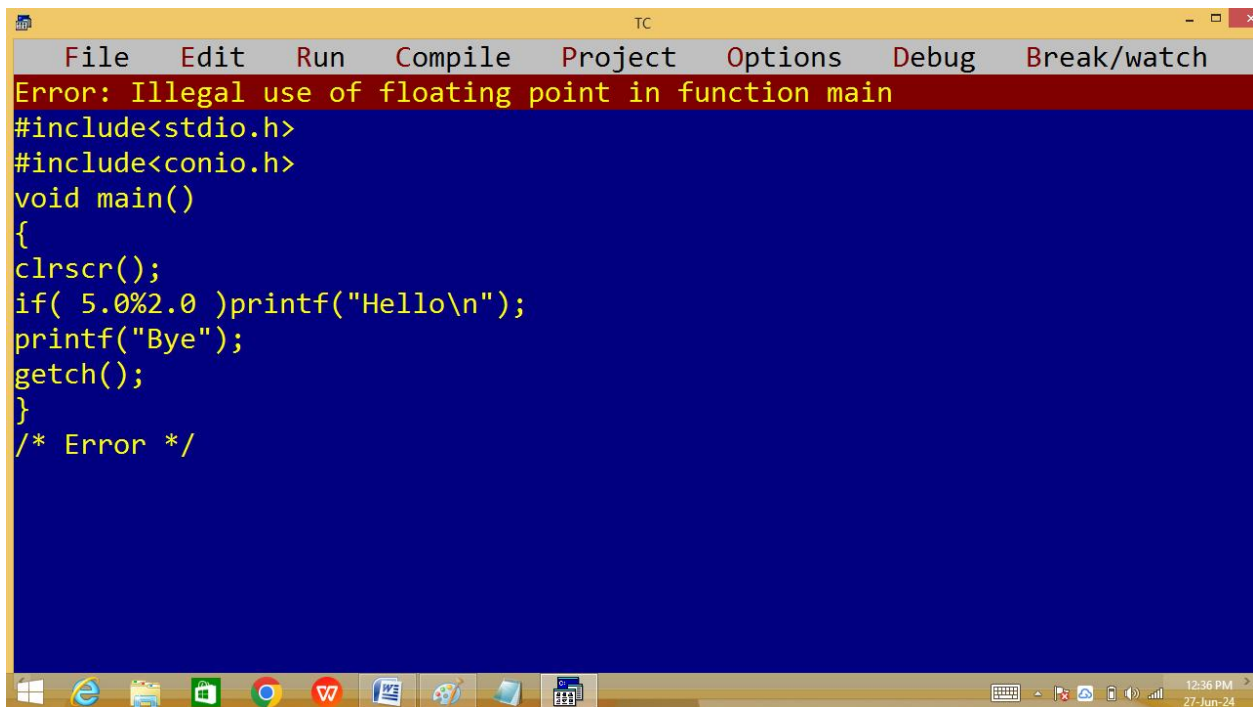
```
#include<stdio.h>
#include<conio.h>
void main()
{
    clrscr();
    if( '0' )printf("Hello\n");
    getch();
}
/* Hello_*/
```



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/watch". The status bar at the top indicates "Line 10", "Col 7", and "Insert Indent Tab Fill Unindent * E:11AM.C". The main editing area has a dark blue background with yellow text. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 'a'/'b' )printf("Hello\n");
printf("Bye");
getch();
}
/* Bye */
```

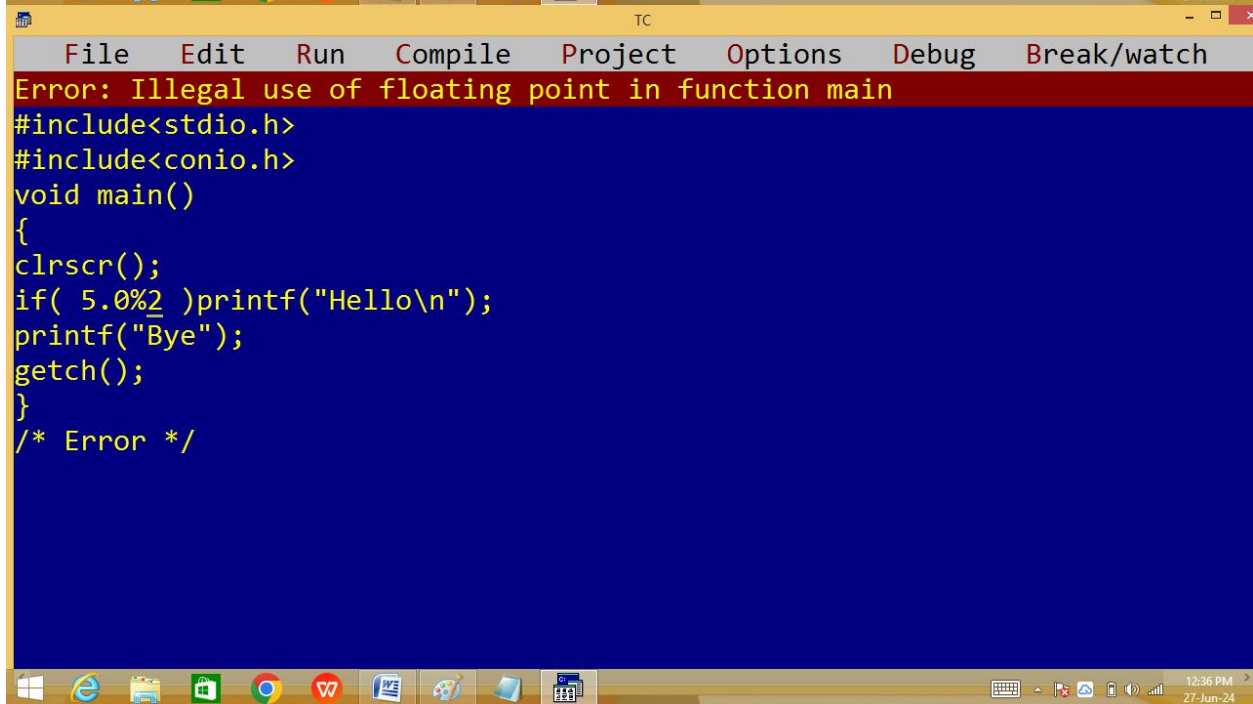
The Windows taskbar is visible at the bottom, showing icons for the Start menu, Internet Explorer, File Explorer, Microsoft Word, Google Chrome, and other applications. The system clock in the bottom right corner shows "12:35 PM" and "27-Jun-24".



The screenshot shows the Turbo C++ (TC) IDE interface. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. A red error message banner at the top reads "Error: Illegal use of floating point in function main". The code editor has a blue background and contains the following C code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5.0%2.0 )printf("Hello\n");
printf("Bye");
getch();
}
/* Error */
```

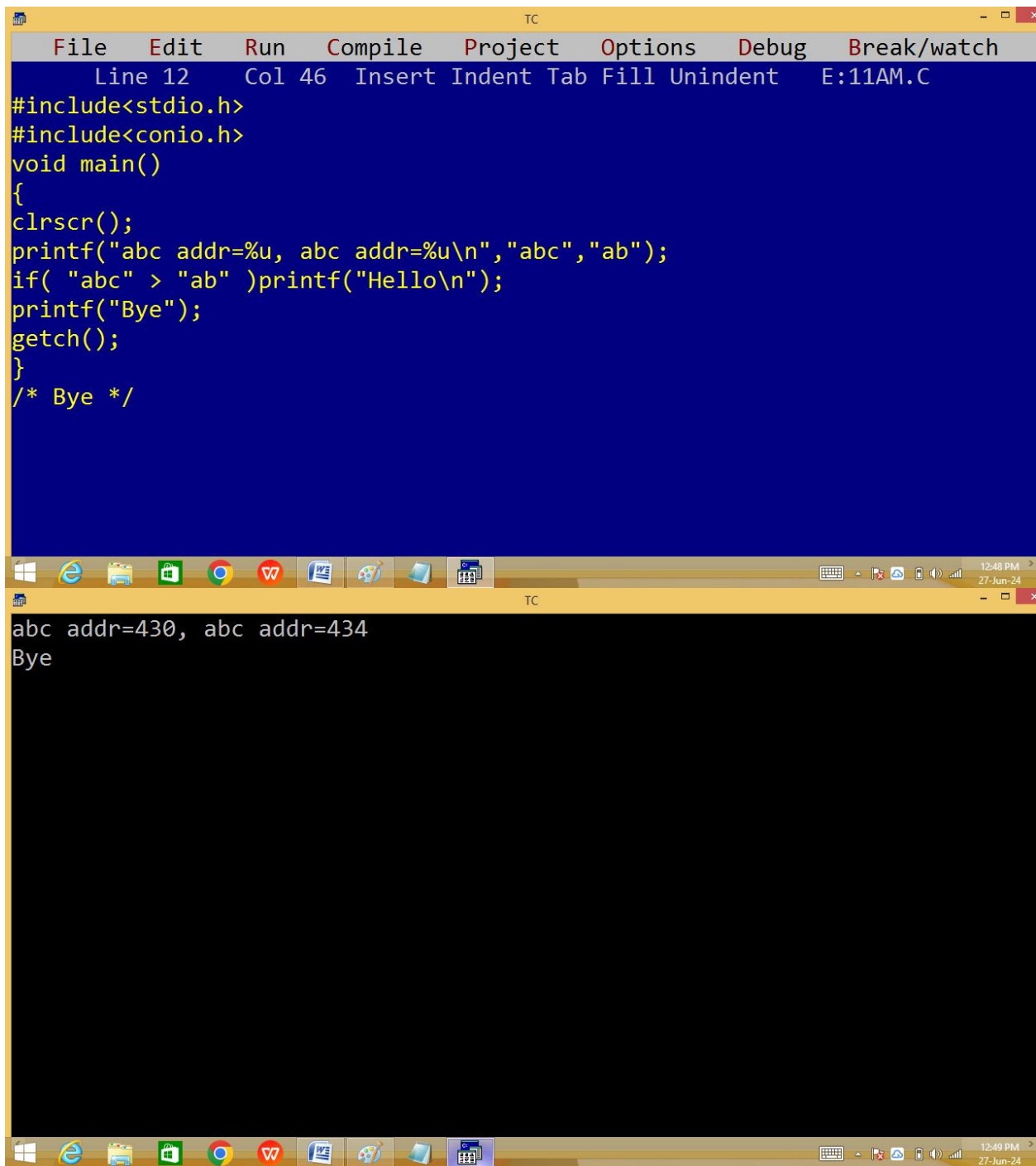
The Windows taskbar at the bottom shows icons for various applications and the system clock indicating 12:36 PM on 27-Jun-24.



This screenshot is identical to the one above, showing the same TC IDE interface and error message. However, the code in the editor has been corrected to use an integer modulus operator:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 5.0%2 )printf("Hello\n");
printf("Bye");
getch();
}
/* Error */
```

The error message "Error: Illegal use of floating point in function main" remains displayed at the top of the editor.



The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays the source code of a C program in a blue editor window. The code includes `<stdio.h>` and `<conio.h>`, defines a `main` function that clears the screen, prints memory addresses for 'abc' and 'ab', compares them, prints 'Hello' if 'abc' is greater, prints 'Bye', and waits for a key press. The bottom screenshot shows the same IDE with the program's output in a black window, displaying the memory addresses and the word 'Bye'.

```
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 46 Insert Indent Tab Fill Unindent E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("abc addr=%u, abc addr=%u\n","abc","ab");
if( "abc" > "ab" )printf("Hello\n");
printf("Bye");
getch();
}
/* Bye */
```

abc addr=430, abc addr=434
Bye

