

```
Line 16 Col 17 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=3,b=1,c;
clrscr();
c = (a++ + ++b)++;
printf("a=%d, b=%d, c=%d\n",a, b,c);
c = ++(++a + b++);
printf("a=%d, b=%d, c=%d\n",a, b,c);
getch();
}
/* 2 Errors
Note: We can't perform incr/decr on expressions. because of exp gives
constant results
*/

Line 12 Col 20 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=3,b=2,c=20;
clrscr();
c = a++ == ++b;
printf("a=%d, b=%d, c=%d\n",a, b,c);
getch();
}

/* a=4, b=3, c=1 */_
```

a=3 b=2 c=20

c = a++ == ++b; priority: ++b, ==, =, a++

1. ++b ==> b=3

2. c = a==b ==> 3==3 ==> true ==> 1

3. c = 1

4. a++ ==> a=4

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 17 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=0,b=2,c=20;
clrscr();
c = a++ && ++b;
printf("a=%d, b=%d, c=%d\n",a, b,c);
getch();
}

/* a=1, b=2, c=0 */

Activate Windows
Go to PC settings to activate Windows.
```

a=0 b=2 ✓ c=20

c = a++ && ++b;

Diagram illustrating the execution of the code snippet `c = a++ && ++b;`. The initial values are `a=0`, `b=2`, and `c=20`. The expression `a++` is underlined in red, and `++b` is underlined in red. A red arrow points from `a++` to `&&`, and another red arrow points from `++b` to `&&`. A green checkmark is placed above `b=2`. A red arrow points from `a++` to `a`, and a green arrow points from `++b` to `b`.

The image shows a screenshot of a Windows desktop with two windows from the Turbo C++ (TC) IDE. The top window is the source code editor, titled 'TC', showing a C program. The code is as follows:

```
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 17 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=0,b=2,c=20;
clrscr();
c = a+++b;
printf("a=%d, b=%d, c=%d\n",a, b,c);
getch();
}

/* a=1, b=2, c=2_*/
```

The bottom window is the output console, also titled 'TC', which displays the result of the program's execution:

```
a=1, b=2, c=2
```

Both windows have a taskbar at the bottom with various application icons and a system tray showing the time as 10:05 AM on 13-Sep-23. An 'Activate Windows' watermark is visible in the bottom right of both windows.

a=0 b=2 c=20

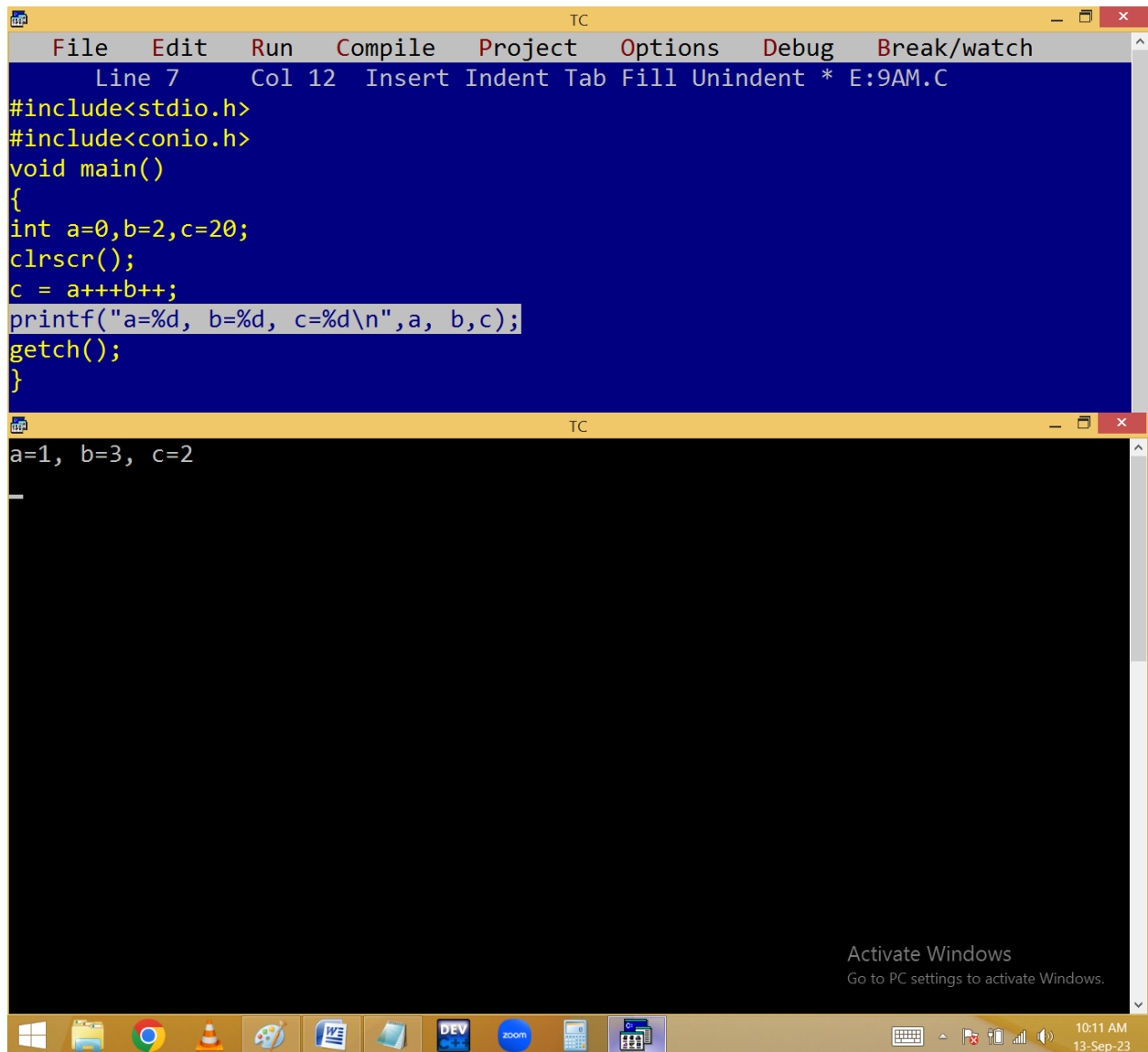
c = a++b**;**

priority: +, =, a++

1. c = a + b ==> 0 + 2

2. c = 2

3. a++ ==> a=1



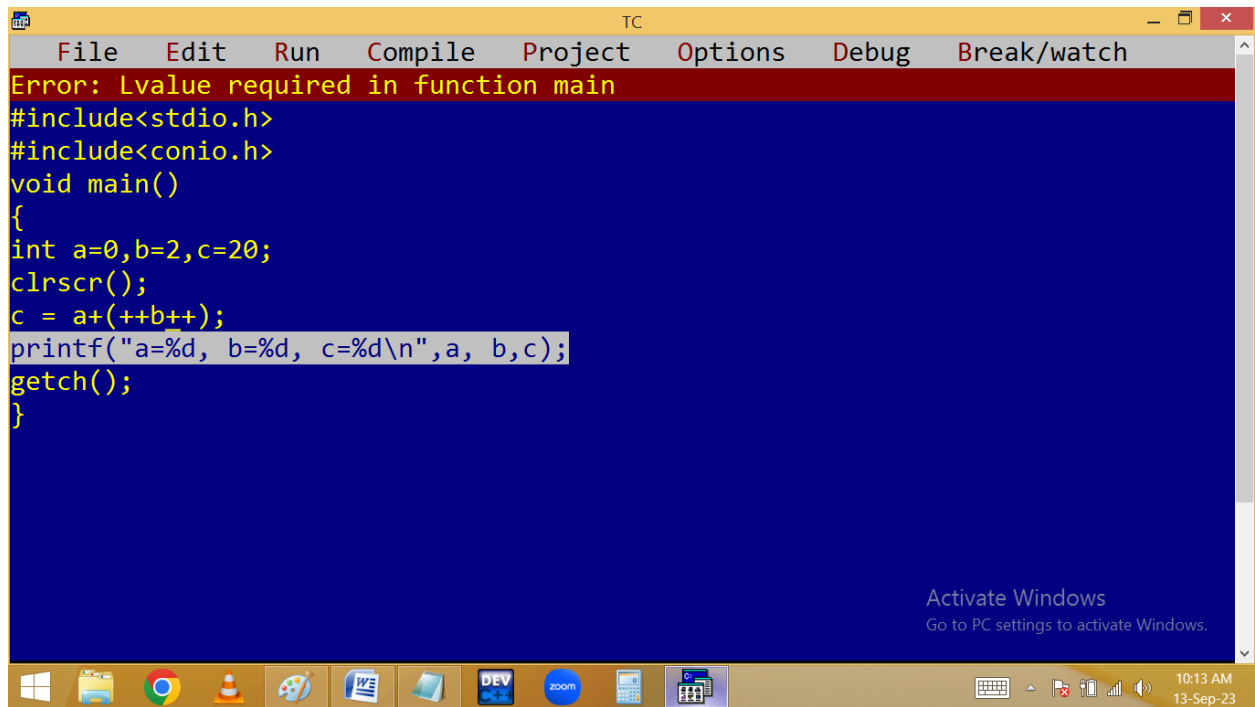
The image shows a screenshot of the Turbo C++ (TC) IDE. The top window, titled "TC", displays a C program with the following code:

```
File Edit Run Compile Project Options Debug Break/watch
Line 7 Col 12 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=0,b=2,c=20;
clrscr();
c = a+++b++;
printf("a=%d, b=%d, c=%d\n",a, b,c);
getch();
}
```

The bottom window, also titled "TC", shows the output of the program:

```
a=1, b=3, c=2
```

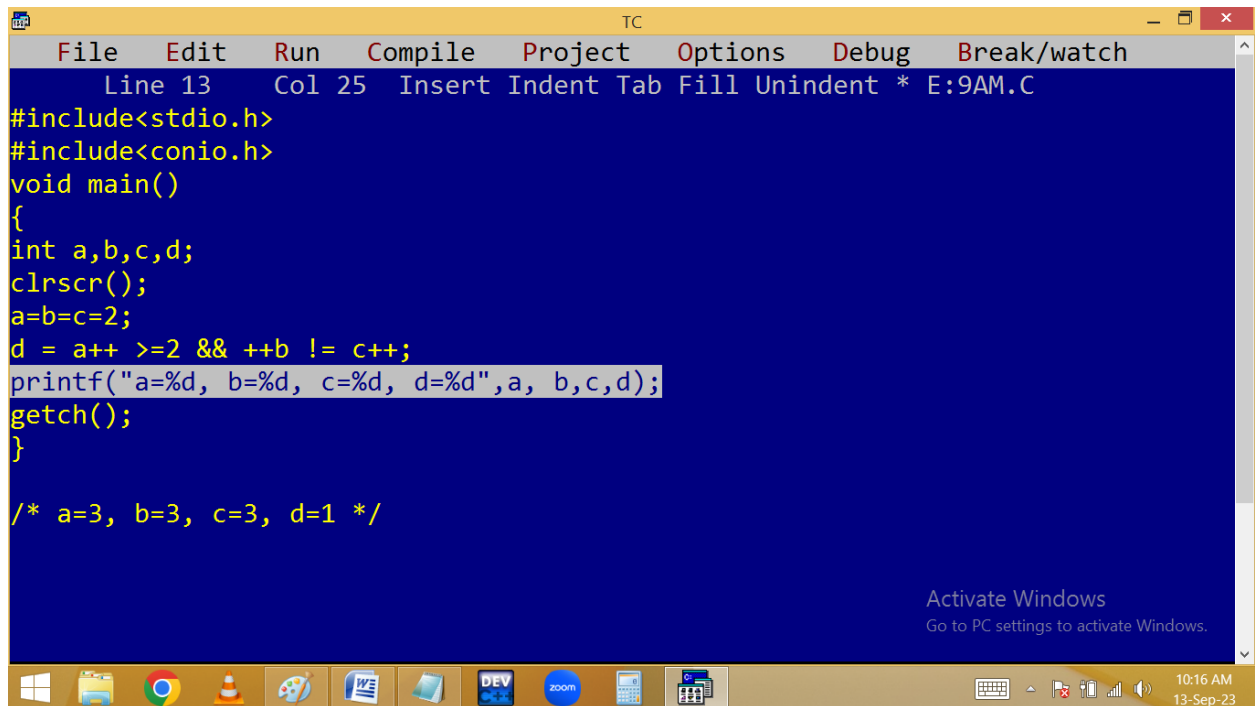
The Windows taskbar at the bottom includes icons for the Start menu, File Explorer, Google Chrome, VLC media player, Paint, Word, a folder, DEV, Zoom, a calculator, and a task manager icon. The system tray on the right shows the time as 10:11 AM on 13-Sep-23, along with icons for keyboard, network, and volume. An "Activate Windows" watermark is visible in the bottom right corner of the IDE window.



The screenshot shows the Turbo C++ IDE with a yellow title bar and a menu bar containing File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. A red error message banner at the top reads "Error: Lvalue required in function main". The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a=0,b=2,c=20;
clrscr();
c = a(++b++);
printf("a=%d, b=%d, c=%d\n",a, b,c);
getch();
}
```

The taskbar at the bottom shows various application icons and the system clock indicating 10:13 AM on 13-Sep-23.



The screenshot shows the Turbo C++ IDE with the same menu bar. A status bar at the top of the editor area displays "Line 13 Col 25 Insert Indent Tab Fill Unindent * E:9AM.C". The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c,d;
clrscr();
a=b=c=2;
d = a++ >=2 && ++b != c++;
printf("a=%d, b=%d, c=%d, d=%d",a, b,c,d);
getch();
}

/* a=3, b=3, c=3, d=1 */
```

The taskbar at the bottom shows the same application icons and the system clock indicating 10:16 AM on 13-Sep-23.

a=2

b=2

c=2

d = a++ >= 2 && ++b != c++;

2 >= 2 3 3 3

1 && 1

1 ✓

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 12 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c,d;
clrscr();
a=b=c=2;
d = a++ >= b++ && ++b != c++;
printf("a=%d, b=%d, c=%d, d=%d",a, b,c,d);
getch();
}

/* a=3, b=4, c=3, d=1 */

Activate Windows
Go to PC settings to activate Windows.
10:21 AM
13-Sep-23
```


a=2

b=2

c=2

d = a++ >= b++ && ++b != c++;

2 >= 2 4 != 2

1 && 1

3 3 4 3

✓ ✓ ✓ ✓

✓

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 17 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c,d;
clrscr();
a=b=c=2;
d = a++ >= b++ || ++b != c++;
printf("a=%d, b=%d, c=%d, d=%d",a, b,c,d);
getch();
}

/* a=3, b=3, c=2, d=1 */

Activate Windows
Go to PC settings to activate Windows.
```

a=2 b=2 c=2 ✓

d = a++ >= b++ || ++b ~~!=~~ c++;

Handwritten annotations: Blue arrows point from 'a' and 'b' to '3' with green checkmarks. Below 'a++' is '2' and below 'b++' is '2' with a blue line connecting them. A blue arrow points from the first '||' to a green checkmark. A red line is drawn through '!= c++;'.

Note: In || operation, when left exp true, right exp not checked.

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 22 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c,d;
clrscr();
a=b=c=2;
d = a++ != b++ && ++b != c++;
printf("a=%d, b=%d, c=%d, d=%d",a, b,c,d);
getch();
}

/* a=3, b=3, c=2, d=0 */

Activate Windows
Go to PC settings to activate Windows.
```

a=2

b=2

c=2 ✓

d = a++ != b++ && ++b != c++;

Handwritten annotations: Blue arrows point from the underlined a++ and b++ to the values 3 and 3 respectively, each with a green checkmark. Below these, the values 2 and 2 are written with blue squiggly lines. A blue arrow points from the first 2 back to the a++ expression. A green checkmark is next to the second 2. A red line is drawn through the ++b and != c++ part of the expression.

Note: In && operations when left exp false, right exp not checked.

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 22 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=0,b=1,c=2,d;
clrscr();
d = a++ || b++ || c++;
printf("a=%d, b=%d, c=%d, d=%d",a, b,c,d);
getch();
}

/* a=1, b=2, c=2, d=1 */

Activate Windows
Go to PC settings to activate Windows.
```

a=0 b=1 c=2 ✓

d = a++ || b++ || c++;

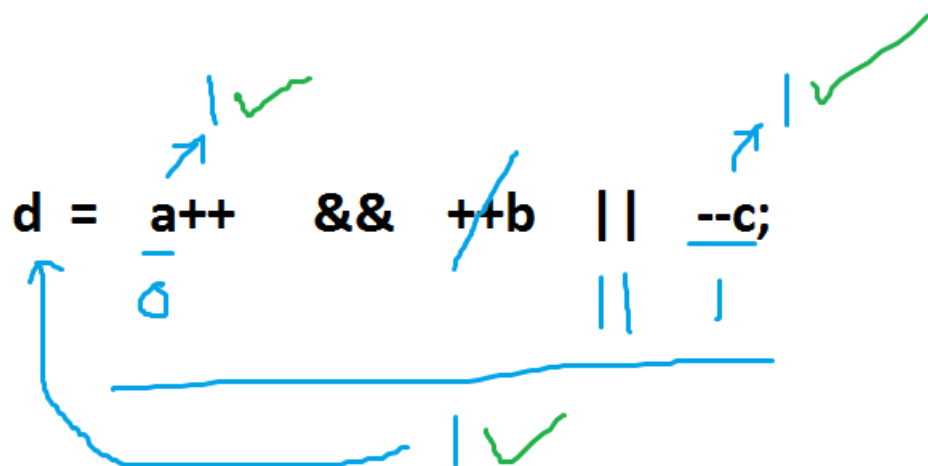
1 ✓ 2 ✓

1 ✓

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 22 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=0,b=1,c=2,d;
clrscr();
d = a++ && ++b || --c;
printf("a=%d, b=%d, c=%d, d=%d",a, b,c,d);
getch();
}

/* a=1, b=1, c=1, d=1_*/
```

a=0 b=1 ✓ c=2 ✓



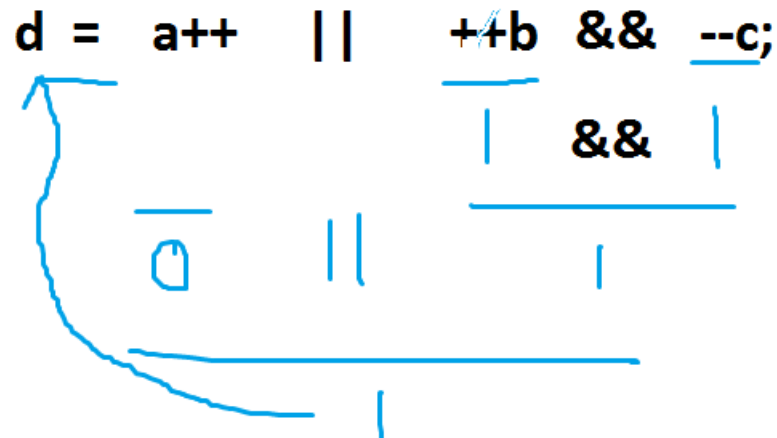
```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 12 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=0,b=1,c=2,d;
clrscr();
d = a++ || ++b && --c;
printf("a=%d, b=%d, c=%d, d=%d",a, b,c,d);
getch();
}

/* a=1, b=2, c=1, d=1 */
```

a=0

b=1 ✓

c=2 ✓



a=0 b=1 ✓ c=2 ✓

d = a++ && ~~++b~~ && ~~--c~~;

