

## **/ - Division [ Quotient ]:**

**5/2=2 [ int/int=int ]**

**5.0/2=2.500000**

**5/2.0=2.500000**

**5.0/2.0=2.500000**

**(float)5/2=2.500000**

**(float)(5/2)=2.000000**

The screenshot shows a Turbo C++ IDE window titled 'TC'. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The editor window shows a C program with the following code:

```
Line 12 Col 31 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=5.5; /* implicit type casting */
float b=5;
clrscr();
printf("a=%d\n",a);
printf("b=%f\n",b);
printf("%f\n", (float)5/2); /* explicit type casting */
printf("%f\n", 5/(float)2); /* explicit type casting */
printf("%f\n", (float)(5/2)); /* explicit type casting */
getch();
}
```

Below the editor, a Zoom toolbar is visible with buttons for Mute, Start Video, Security, Participants (52), Chat, New Share, Pause Share, Annotate, Apps, and More. The Windows taskbar at the bottom shows the Start button, taskbar icons for File Explorer, Chrome, VLC, Paint, Word, and several utility icons, and the system clock showing 10:03 AM on 09-Sep-23.

The output window below the editor displays the following results:

```
a=5
b=5.000000
2.500000
2.500000
2.000000
```

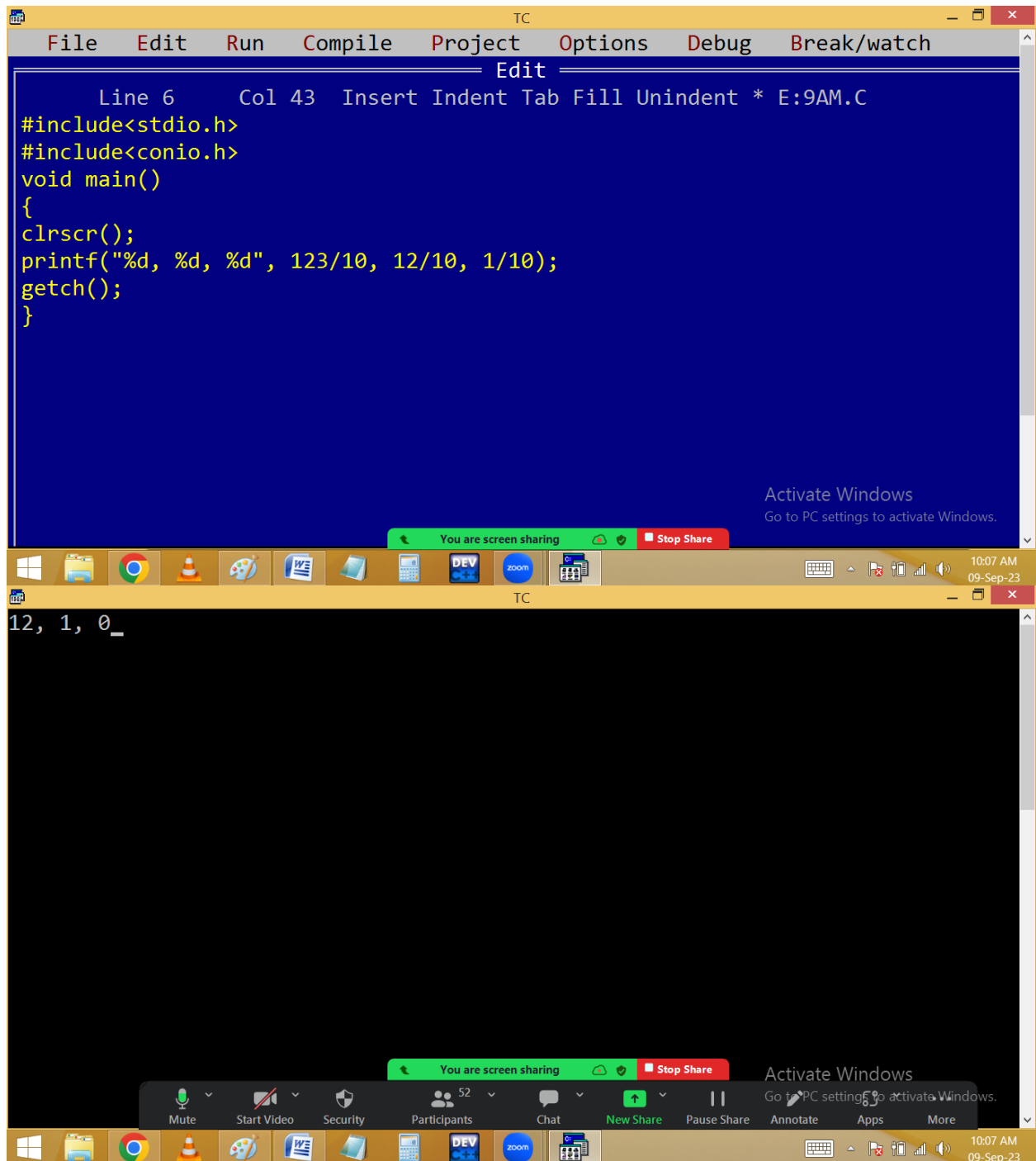
At the bottom of the output window, there is an 'Activate Windows' watermark and a Zoom toolbar with 'You are screen sharing' and 'Stop Share' buttons. The system clock at the bottom right shows 10:04 AM on 09-Sep-23.

$$123/10=12$$

$$12/10=1$$

$$1/10=0$$

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

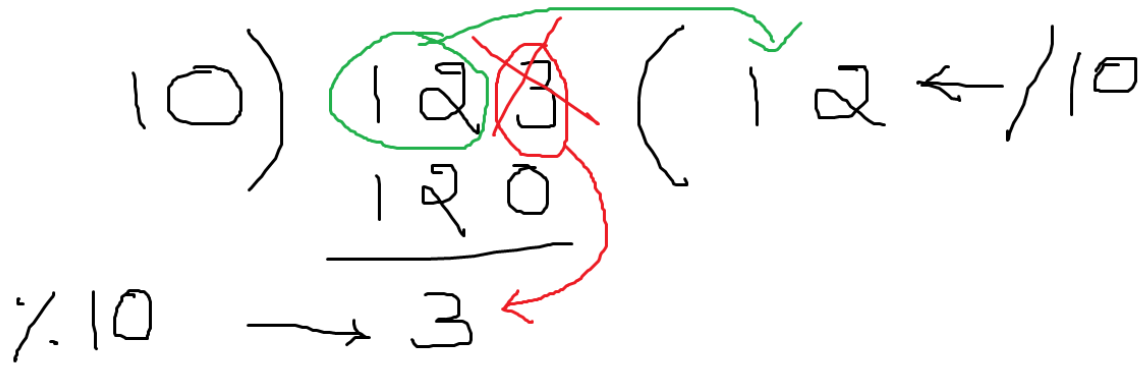


The image shows a screenshot of a Turbo C++ (TC) IDE. The top window displays a C program with the following code:

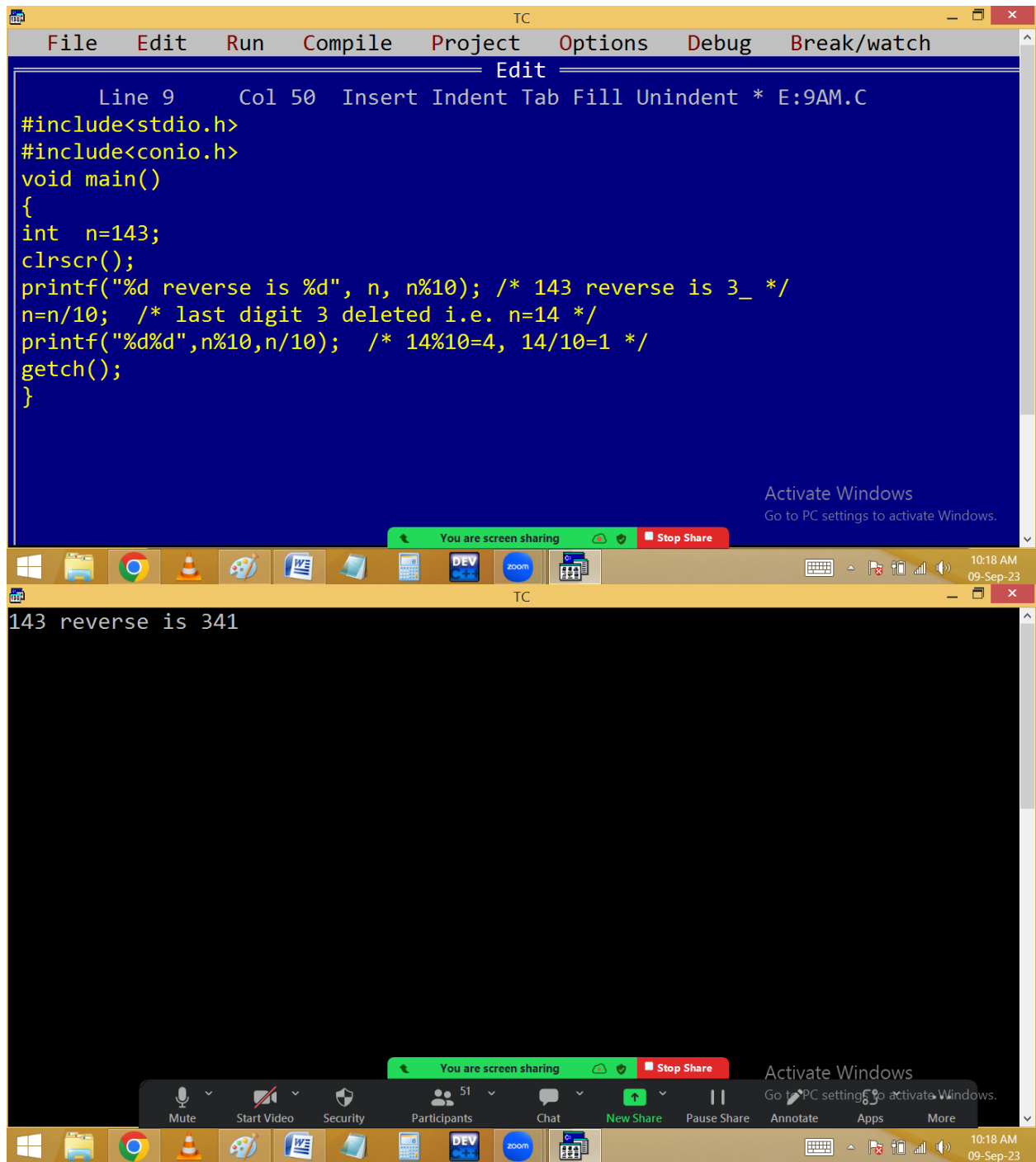
```
Line 6   Col 43   Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d, %d, %d", 123/10, 12/10, 1/10);
getch();
}
```

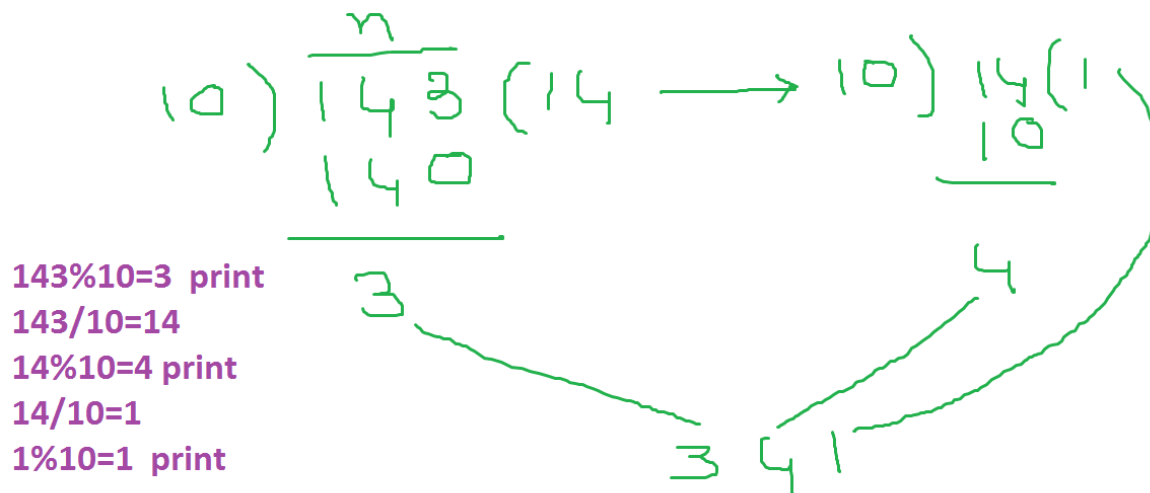
The bottom window shows the output of the program: "12, 1, 0\_".

Both windows have a status bar at the bottom indicating "You are screen sharing" and "Stop Share". The Windows taskbar at the bottom shows the time as 10:07 AM on 09-Sep-23.



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





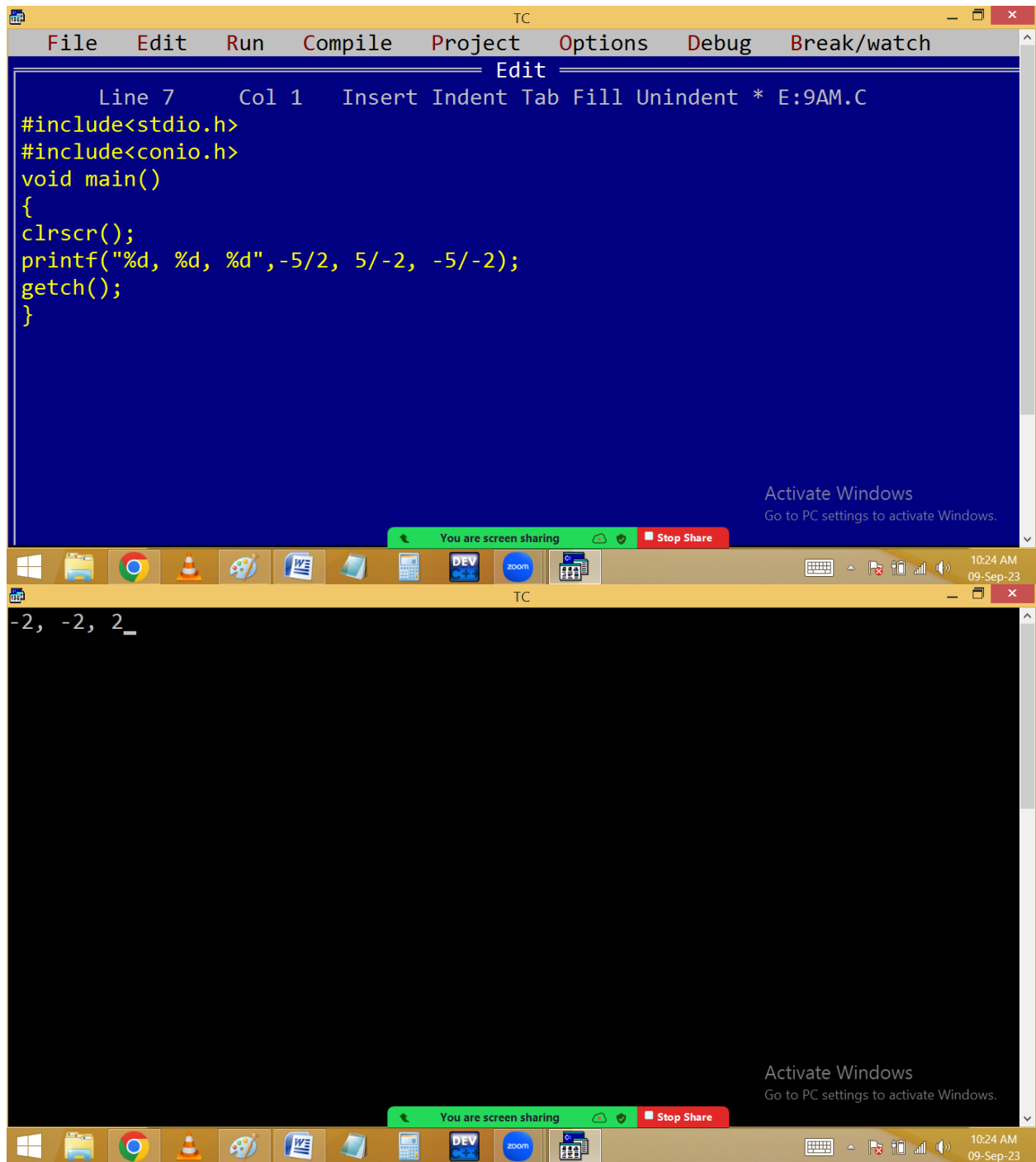
143%10=3 print  
 143/10=14  
 14%10=4 print  
 14/10=1  
 1%10=1 print

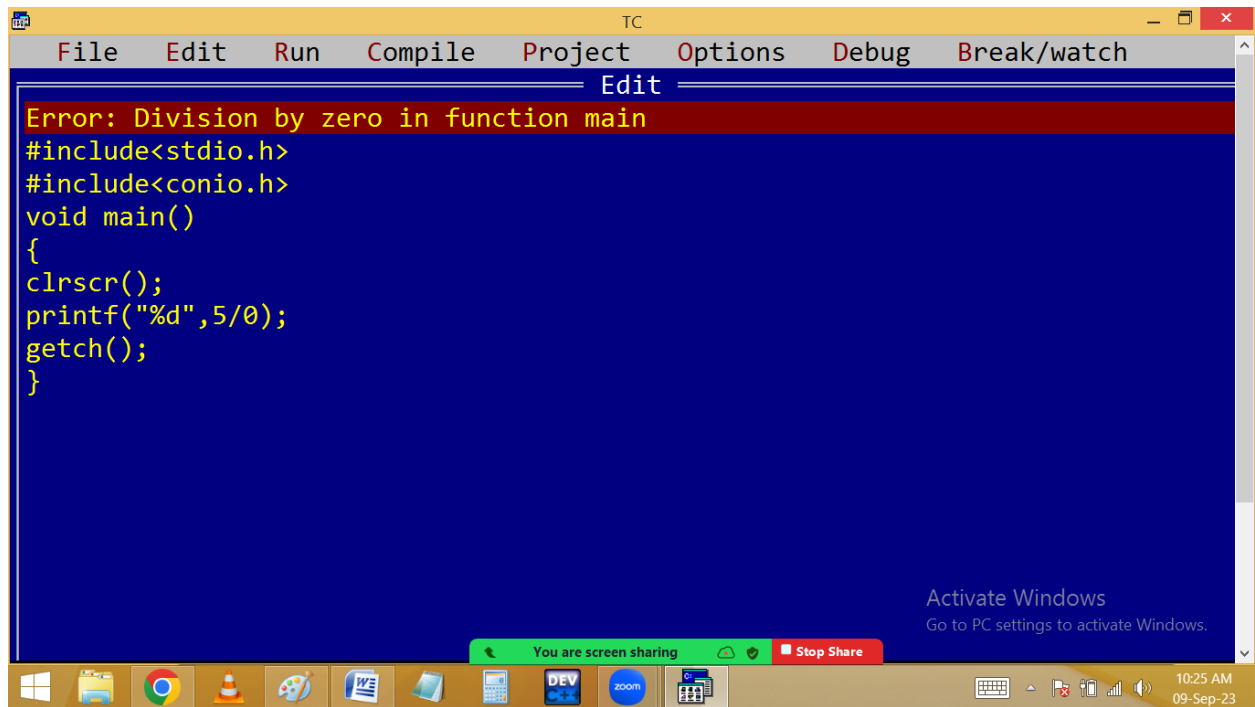
$$-5/2 = -2$$

$$5/-2 = -2$$

$$-5/-2 = 2$$

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

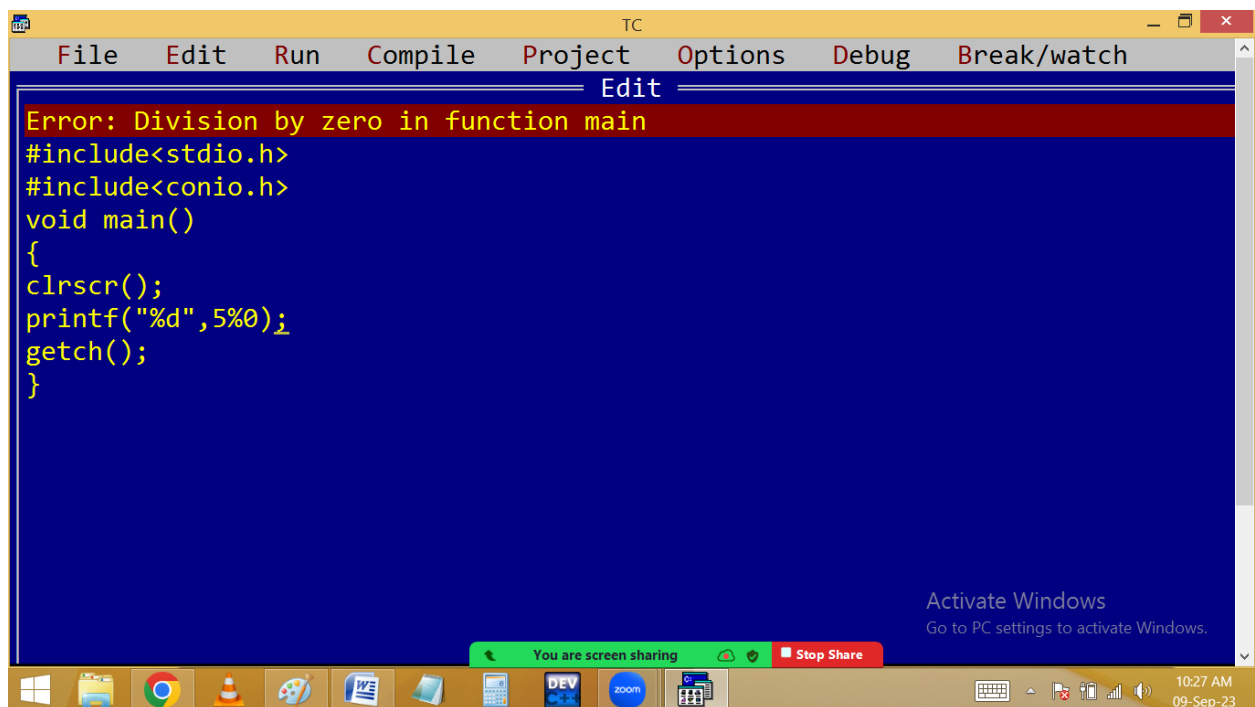




The screenshot shows the Turbo C++ IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a toolbar. The main editing area has a blue background and contains the following C code:

```
Error: Division by zero in function main
#include<stdio.h>
#include<conio.h>
void main()
{
    clrscr();
    printf("%d",5/0);
    getch();
}
```

An error message "Error: Division by zero in function main" is displayed at the top of the code area. The Windows taskbar at the bottom shows various icons, including the Start button, File Explorer, Chrome, VLC, Paint, Word, and several utility icons. A green notification bar at the bottom of the IDE window says "You are screen sharing" with a "Stop Share" button. The system clock in the bottom right corner shows "10:25 AM 09-Sep-23".

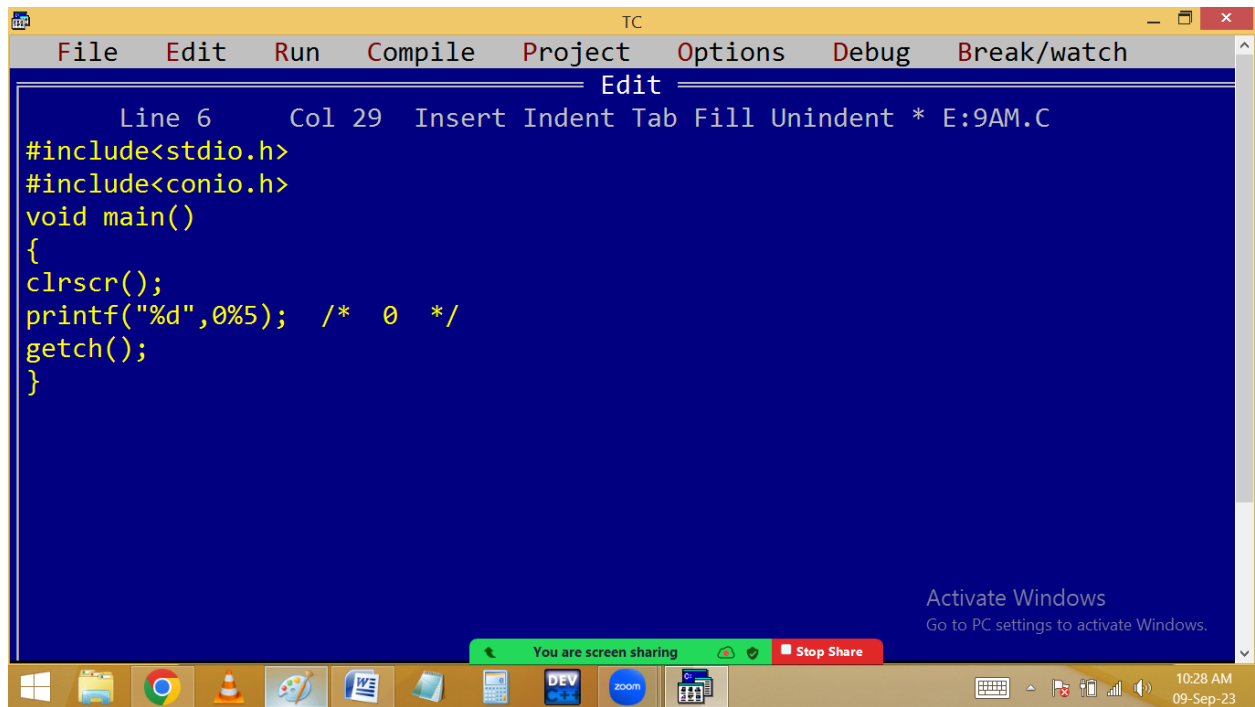


The screenshot shows the Turbo C++ IDE with the same menu bar and toolbar as the first image. The main editing area contains the following C code:

```
Error: Division by zero in function main
#include<stdio.h>
#include<conio.h>
void main()
{
    clrscr();
    printf("%d",5%0);
    getch();
}
```

An error message "Error: Division by zero in function main" is displayed at the top of the code area. The code is identical to the first image, except for the addition of a semicolon at the end of the `printf` statement: `printf("%d",5%0);`. The Windows taskbar and the "You are screen sharing" notification bar are also present. The system clock in the bottom right corner shows "10:27 AM 09-Sep-23".



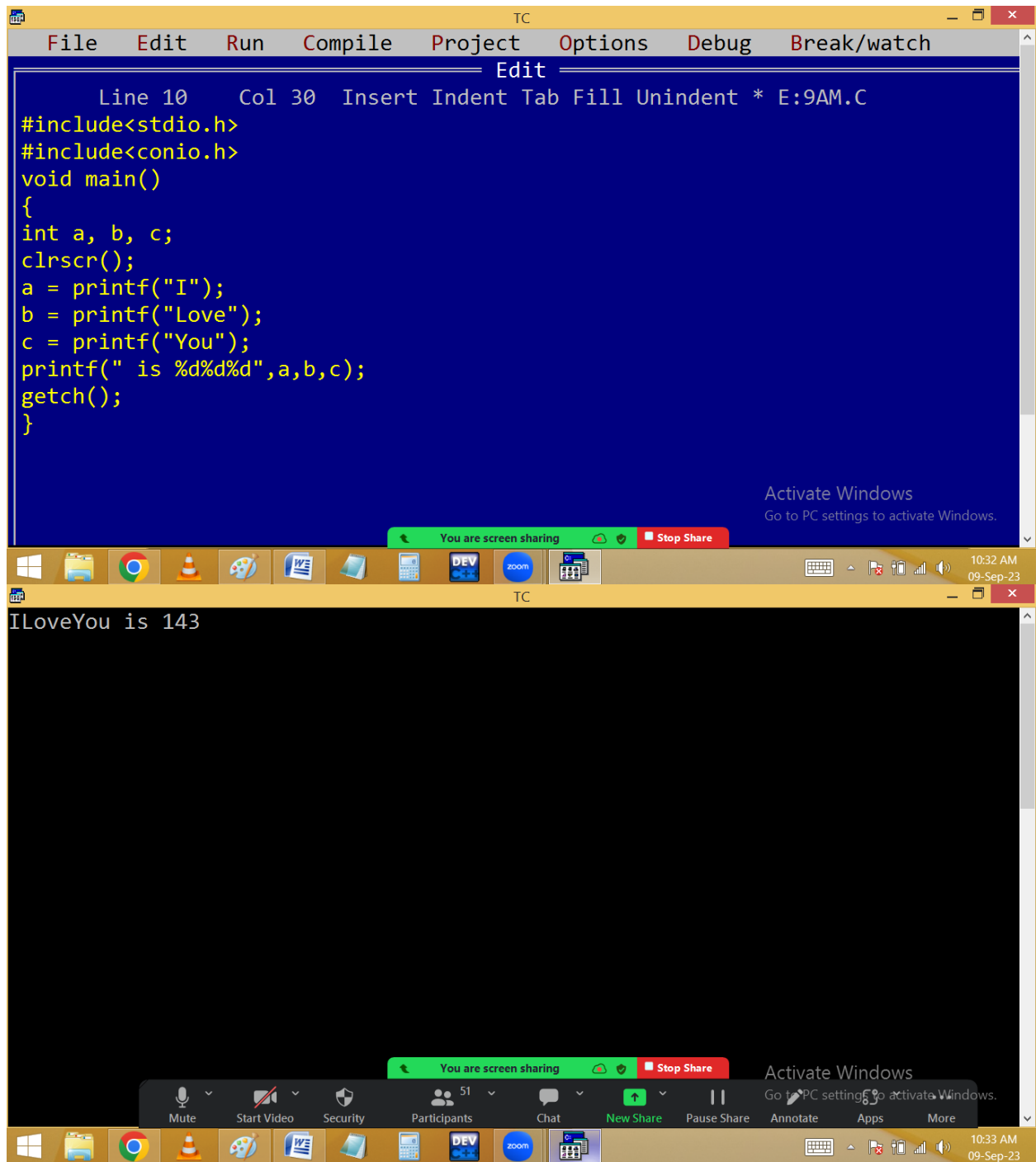


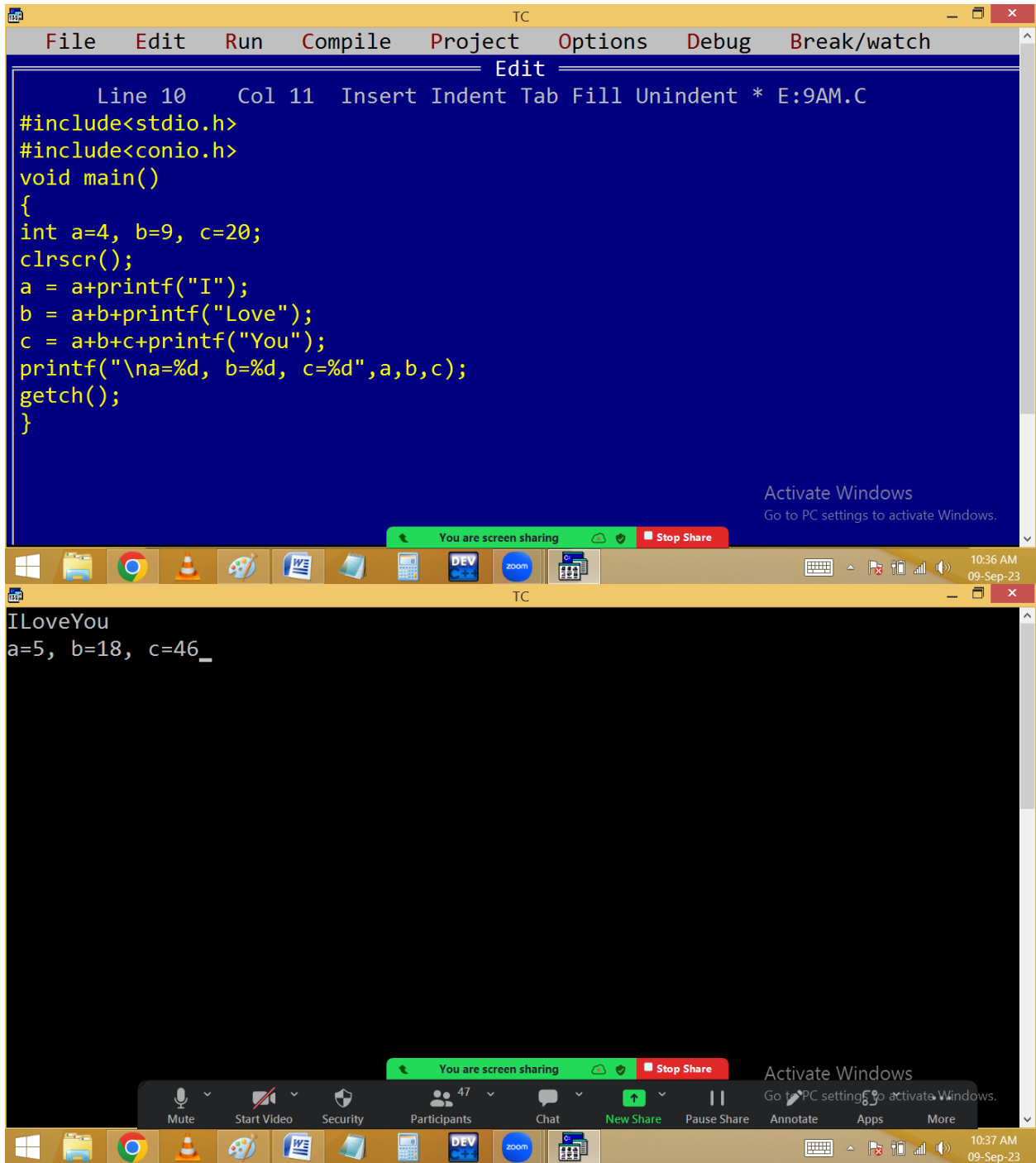
```
TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 6 Col 29 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d",0%5); /* 0 */
getch();
}
```

Activate Windows  
Go to PC settings to activate Windows.

You are screen sharing Stop Share

10:28 AM  
09-Sep-23





The image shows a screenshot of the Turbo C++ (TC) IDE. The top window, titled 'TC', is in 'Edit' mode and displays a C program. The code is as follows:

```
Line 10 Col 9 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a, b, c;
clrscr();
a = printf("I Love You\n")==printf("You Hate Me\n");
b = printf("I hate you\n")>=printf("My Crush\n");
c = a+b+printf("Thank You\n");
printf("_a=%d, b=%d, c=%d",a,b,c);
getch();
}
```

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

```
I Love You
You Hate Me
I hate you
My Crush
Thank You
a=0, b=1, c=11_
```

Both windows feature a taskbar at the bottom with icons for Windows, File Explorer, Google Chrome, VLC, Paint, Word, and other applications. A green notification bar in the center of the taskbar indicates 'You are screen sharing' with a 'Stop Share' button. The system clock in the bottom right corner shows '10:41 AM 09-Sep-23'. An 'Activate Windows' watermark is visible in the bottom right of both windows.

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

They are used to given condition / expression is true or false. If condition true always it return 1. Condition false it return 0.



```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n", 'a'-32=='A'); /* 97-32=65==65 */
printf("%d\n", 5+3/2==4); /* 3/2=1+5=6==4==> false */
printf("%d\n", (5+3)/2==4);
printf("%d\n", 5-3+2==4);
printf("%d\n", 5*3%2==1);
printf("%d\n", 'a'/'b'==1);
printf("%d\n", 2+3*4+5==45);
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", 5%4/1==0);
getch();
}
```

1  
0  
1  
1  
1  
0  
0  
1  
0  
1  
0