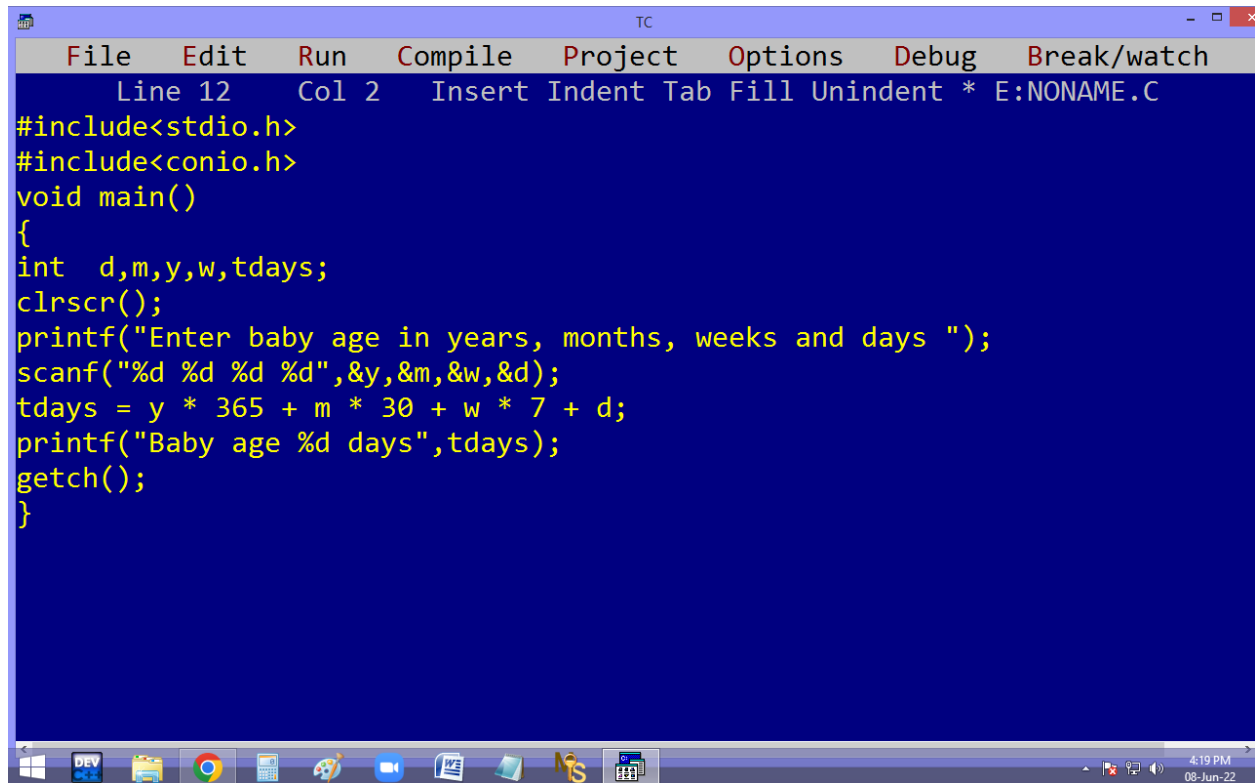


Read baby age in years, months, weeks and days. Find the baby age in total days.



The image shows a screenshot of a Turbo C++ (TC) IDE window. The title bar reads "TC". The menu bar includes "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Break/watch". The status bar at the top indicates "Line 12 Col 2 Insert Indent Tab Fill Unindent * E:NONAME.C". The main editing area has a dark blue background with yellow text. The code is as follows:

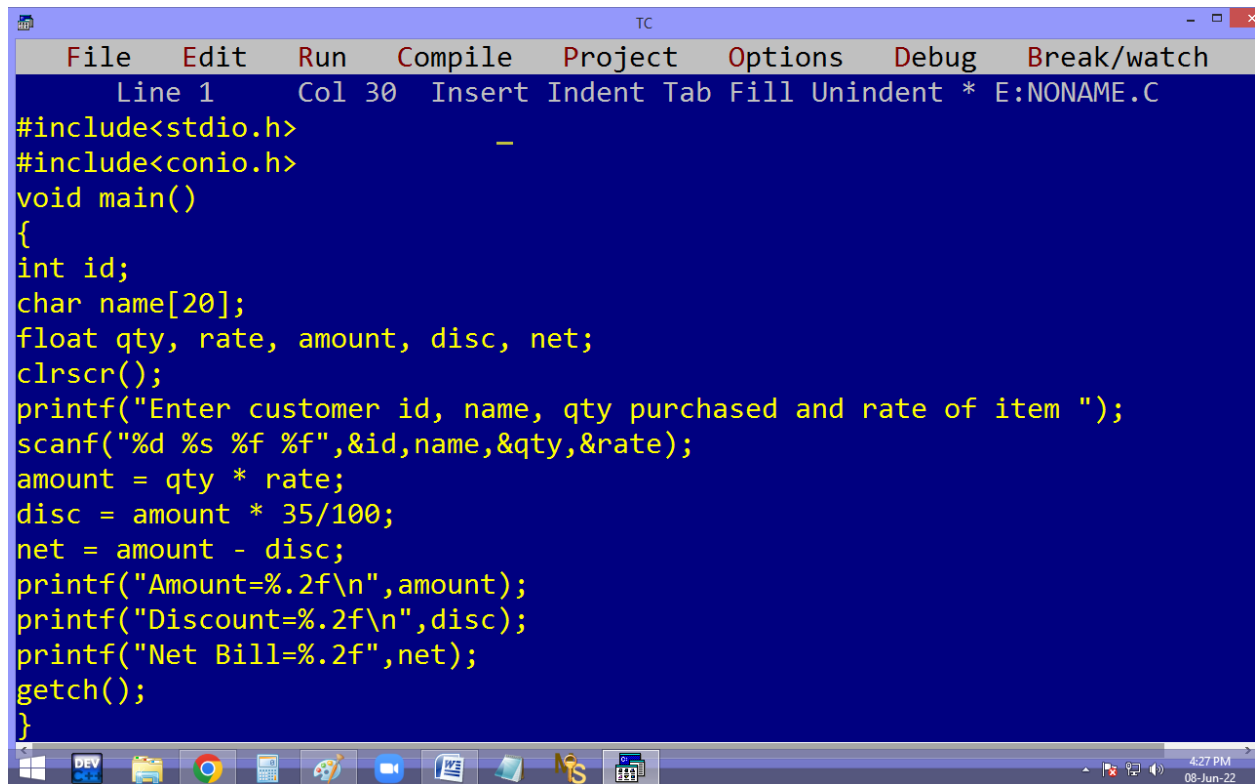
```
#include<stdio.h>
#include<conio.h>
void main()
{
int  d,m,y,w,tdays;
clrscr();
printf("Enter baby age in years, months, weeks and days ");
scanf("%d %d %d %d",&y,&m,&w,&d);
tdays = y * 365 + m * 30 + w * 7 + d;
printf("Baby age %d days",tdays);
getch();
}
```

The Windows taskbar is visible at the bottom, showing icons for Windows, DEV C++, File Explorer, Google Chrome, Calculator, Paint, and others. The system clock in the bottom right corner shows "4:19 PM" and "08-Jun-22".

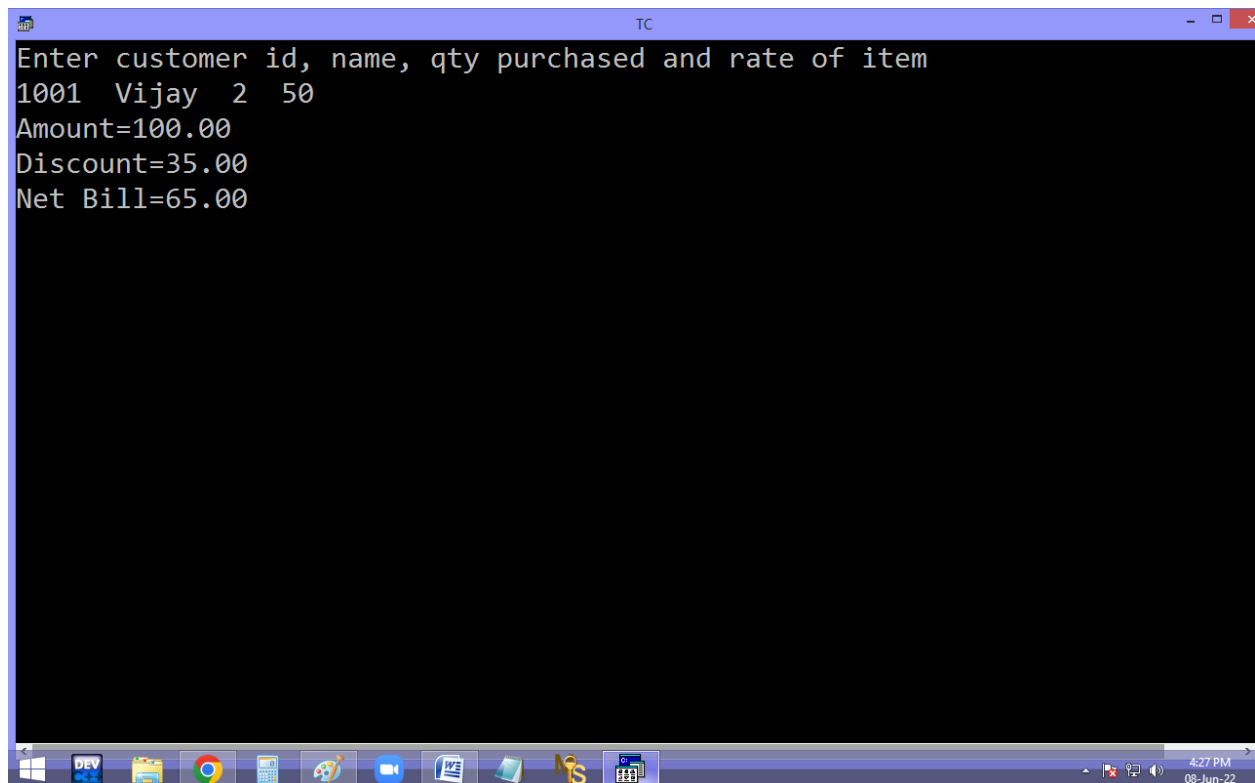
```
TC
Enter baby age in years, months, weeks and days 1 4 2 1
Baby age 500 days_
```

$$365 * 1 + 4 * 30 + 2 * 7 + 1 = 500$$

Eg. read customer id, name, quantity purchased and rate of item. Find the total, 35% of discount and net bill.



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 1 Col 30 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int id;
char name[20];
float qty, rate, amount, disc, net;
clrscr();
printf("Enter customer id, name, qty purchased and rate of item ");
scanf("%d %s %f %f",&id,name,&qty,&rate);
amount = qty * rate;
disc = amount * 35/100;
net = amount - disc;
printf("Amount=%.2f\n",amount);
printf("Discount=%.2f\n",disc);
printf("Net Bill=%.2f",net);
getch();
}
```



```
TC
Enter customer id, name, qty purchased and rate of item
1001 Vijay 2 50
Amount=100.00
Discount=35.00
Net Bill=65.00
```

Deciding discount at runtime:

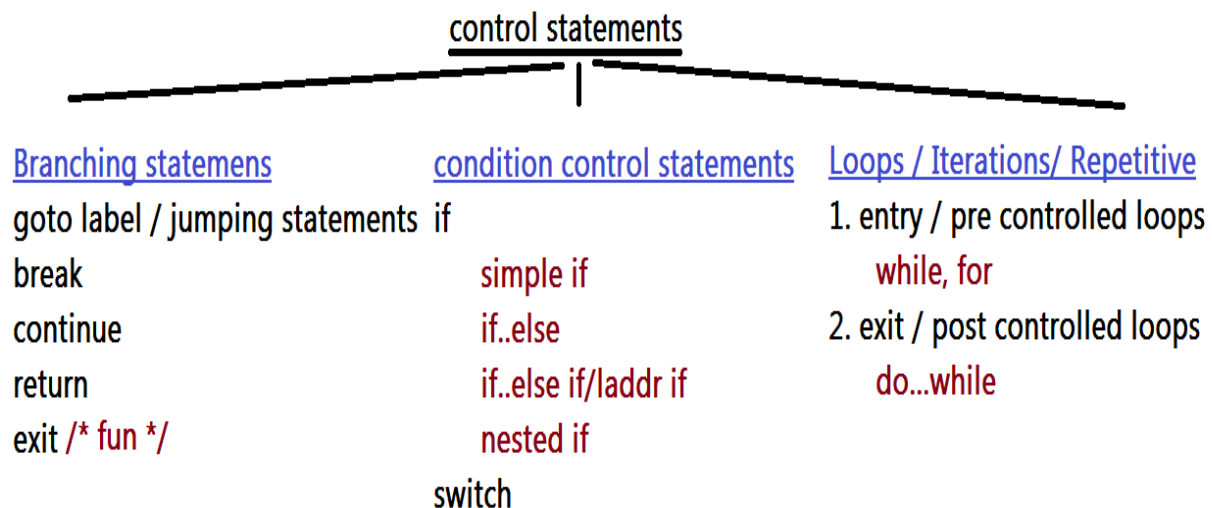
```
TC
Line 19 Col 1 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int id;
char name[20];
float qty, rate, amount, disc, net;
clrscr();
printf("Enter customer id, name, qty purchased and rate of item ");
scanf("%d %s %f %f",&id,name,&qty,&rate);
amount = qty * rate;
printf("Amount=%.2f\n",amount);
printf("Enter discount percentage "); scanf("%f",&disc);
disc = amount * disc/100;
net = amount - disc;
printf("Discount=%.2f\n",disc);
printf("Net Bill=%.2f",net);
getch();
}
```

```
TC
Enter customer id, name, qty purchased and rate of item
102 ramya 1 1
Amount=1.00
Enter discount percentage 0
Discount=0.00
Net Bill=1.00_
```

```
TC
Enter customer id, name, qty purchased and rate of item
103 kishan 1 55000
Amount=55000.00
Enter discount percentage 50
Discount=27500.00
Net Bill=27500.00
```

CONTROL STATEMENTS / CONTROL STRUCTURES

They are used to control program execution order. We can control program execution order using following statements.



goto label / jumping statement

It is used to transfer program execution from one place to another place [label].

In this process it is jumping from one area to another without any condition. Hence it is also called **unconditional** jumping statement.

Syntax:

```
.....;  
.....;  
goto label;  
.....;  
.....;  
label:  
.....;  
.....;
```

Here **goto** is a keyword.

Label is an identifier is used to identify the area[line].

Every label should be end with **:** (**colon**)

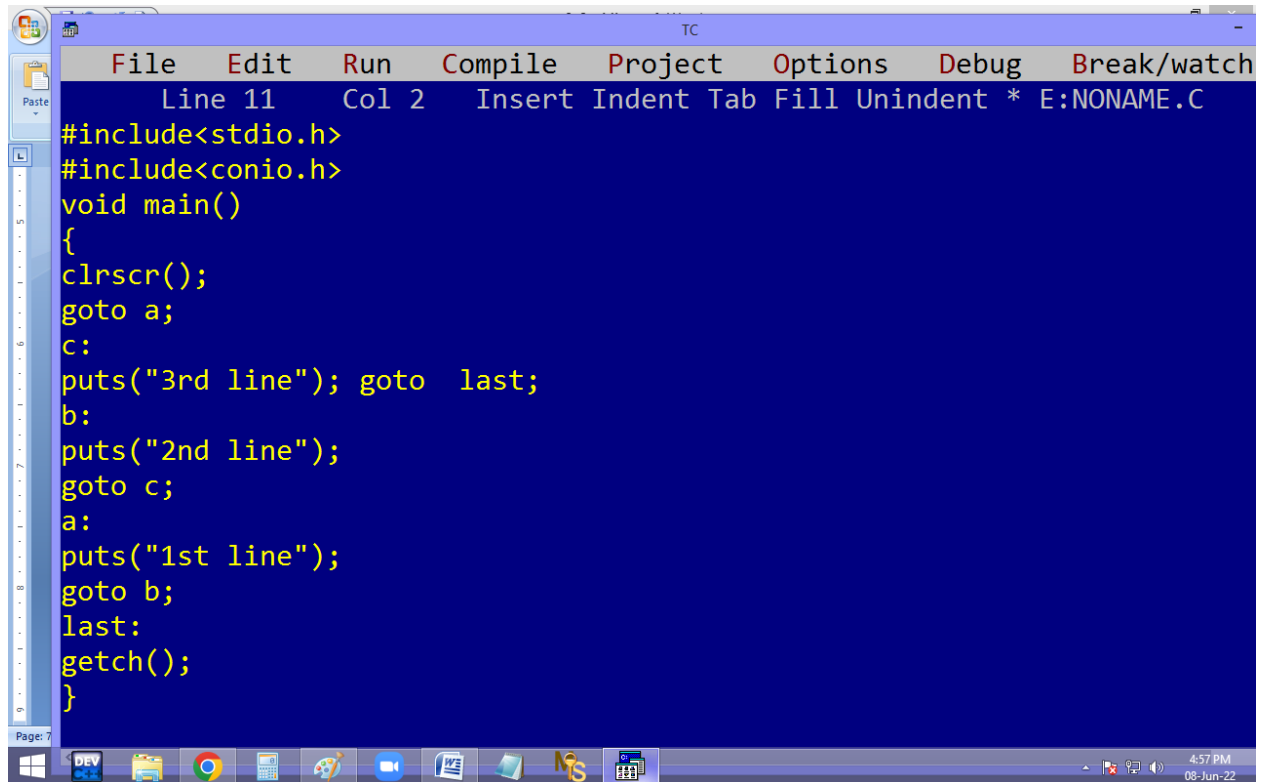
Keywords not allowed in labels i.e. label should be user defined.

Duplicate labels not allowed.

There is no space between go and to.

Label naming rules are similar to the identifier rules.

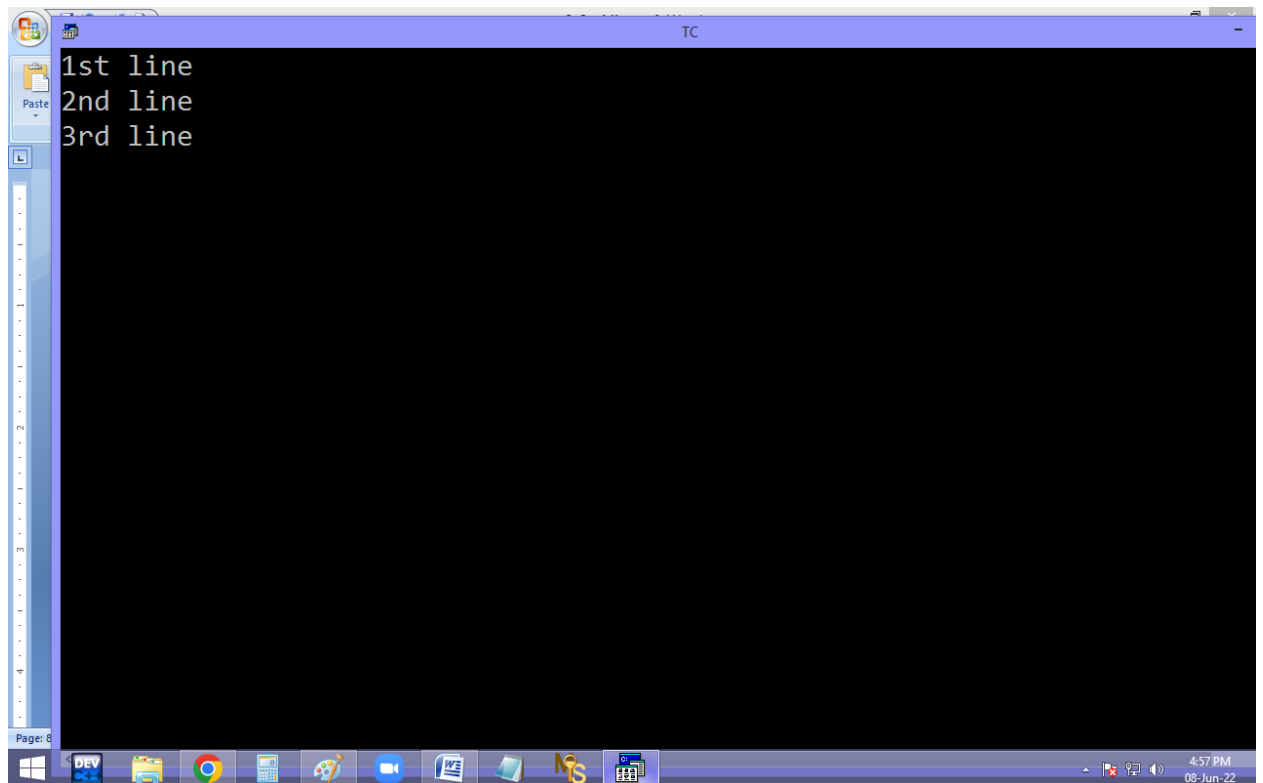
Note: goto label working style is similar to loops some times.



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 window displays a C program with the following code:

```
Line 11 Col 2 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
goto a;
c:
puts("3rd line"); goto last;
b:
puts("2nd line");
goto c;
a:
puts("1st line");
goto b;
last:
getch();
}
```

The left sidebar shows a line number indicator from 1 to 11. The status bar at the bottom indicates "Page: 7" and the system clock shows "4:57 PM 08-Jun-22".



The screenshot shows the Turbo C++ IDE with the same menu bar and toolbar. The main window displays the output of the program:

```
1st line
2nd line
3rd line
```

The left sidebar shows a line number indicator from 1 to 4. The status bar at the bottom indicates "Page: 8" and the system clock shows "4:57 PM 08-Jun-22".

TC

File Edit Run Compile Project Options Debug Break/watch

Line 15 Col 1 Insert Indent Tab Fill Unindent * E:NONAME.C

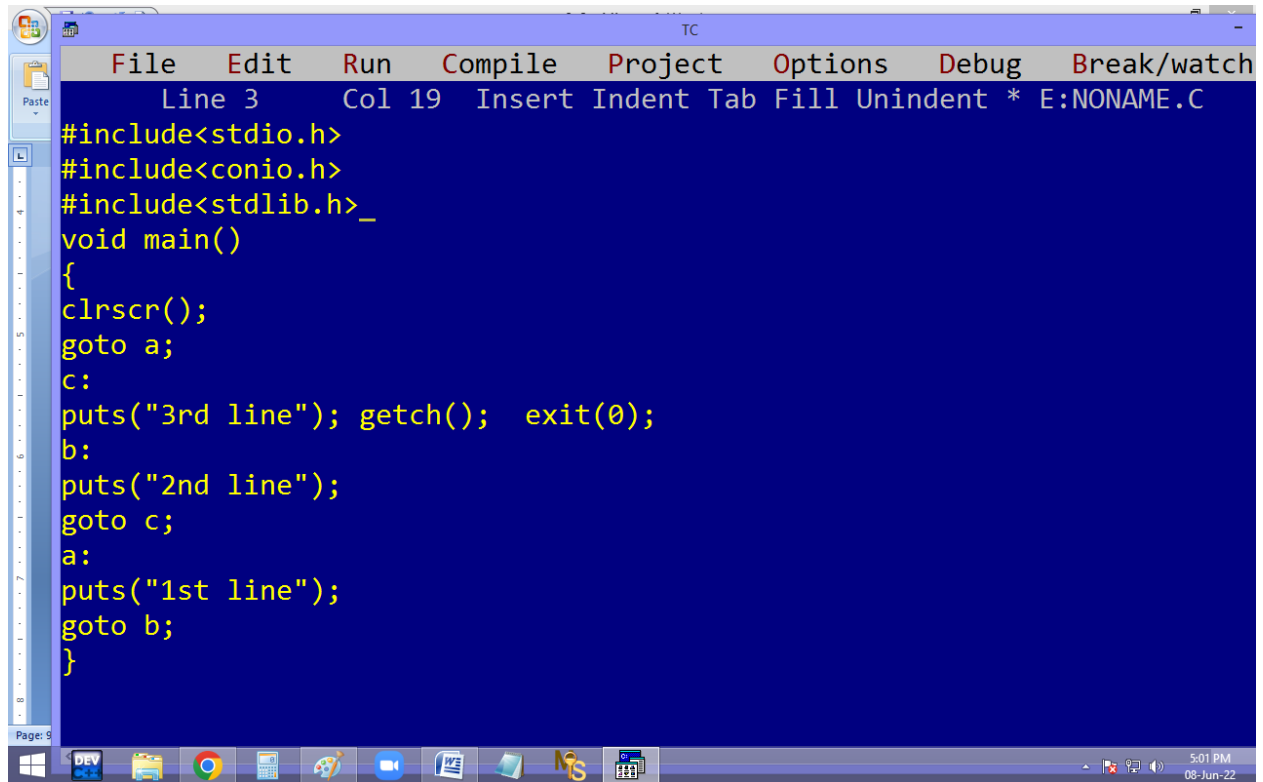
```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
goto a;
c:
puts("3rd line"); getch(); return;
b:
puts("2nd line");
goto c;
a:
puts("1st line");
goto b;
}
```

Page: 8

TC

```
1st line
2nd line
3rd line
```

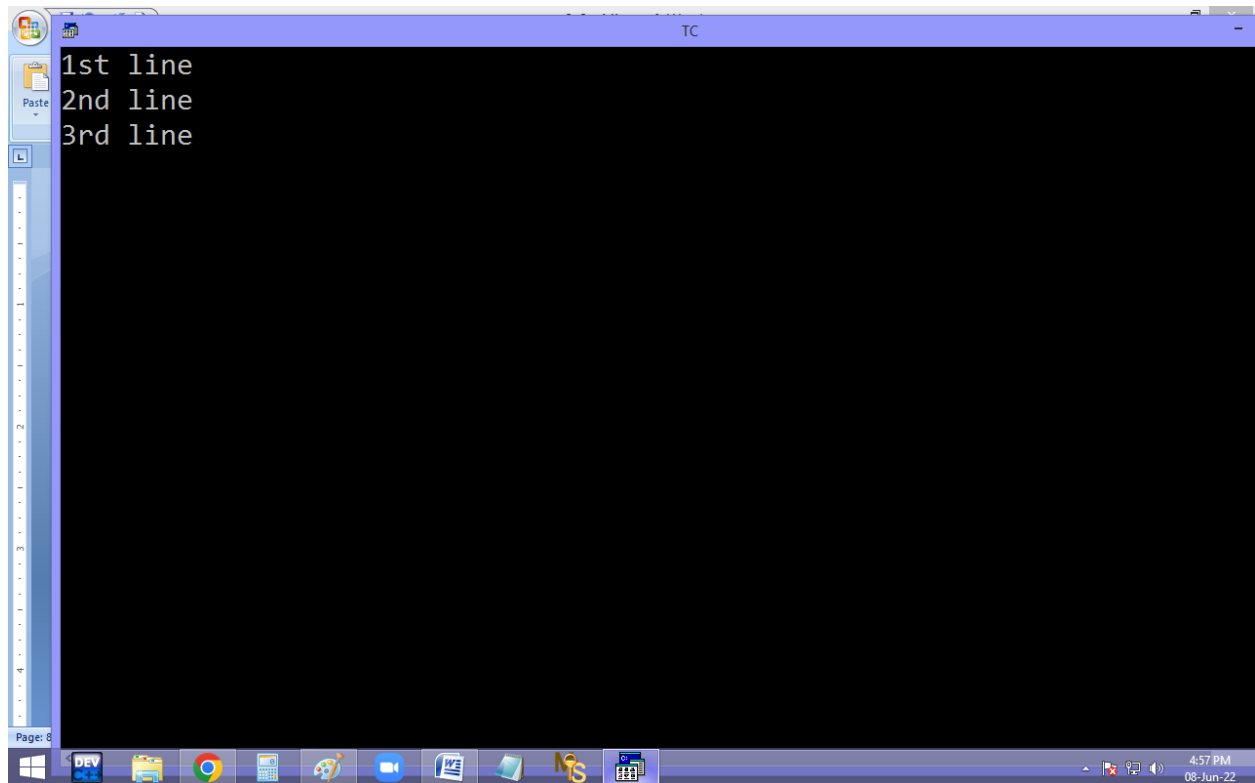
Page: 8



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 window displays a C program in a blue editor. The program includes `<stdio.h>`, `<conio.h>`, and `<stdlib.h>`. It defines a `main` function that uses `clrscr()` to clear the screen, then uses `goto` statements to print lines in reverse order: "3rd line", "2nd line", and "1st line". The program ends with `exit(0)`. The status bar at the bottom indicates "Page: 9" and the system clock shows 5:01 PM on 08-Jun-22.

```
File Edit Run Compile Project Options Debug Break/watch
Line 3 Col 19 Insert Indent Tab Fill Unindent * E:NONAME.C

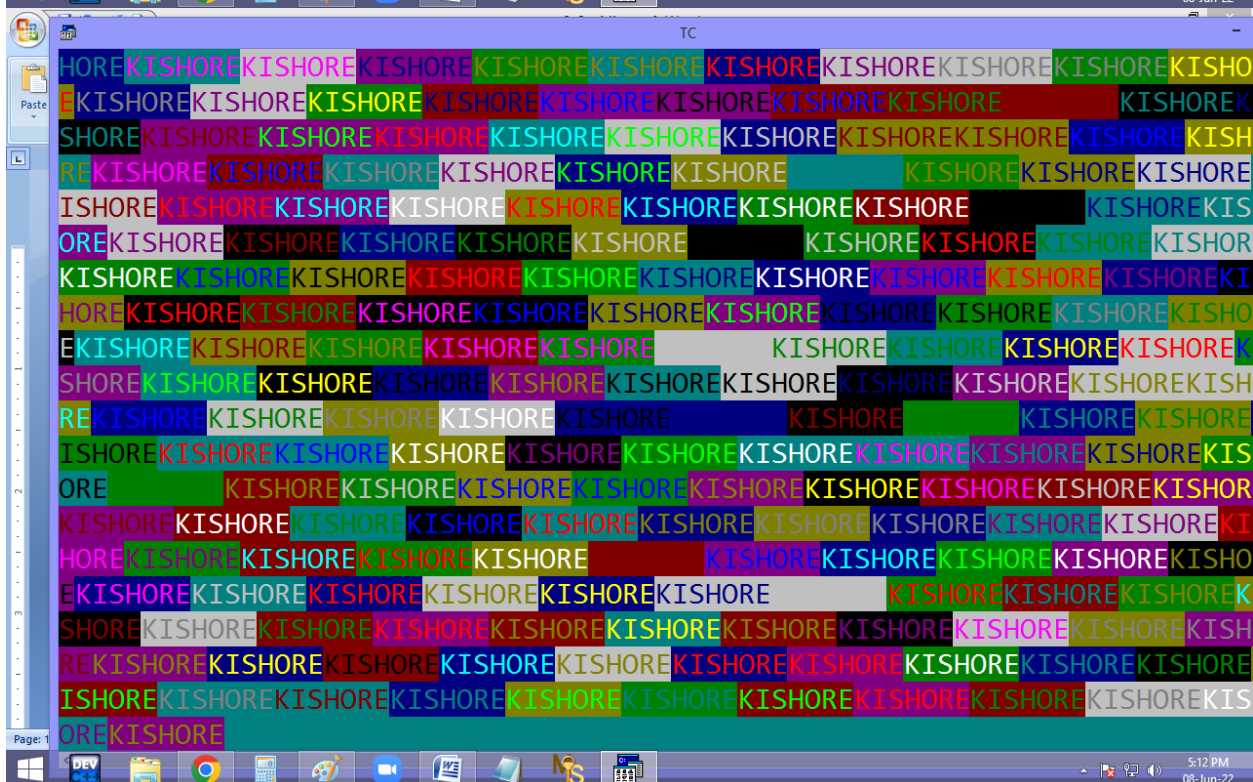
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>_
void main()
{
clrscr();
goto a;
c:
puts("3rd line"); getch(); exit(0);
b:
puts("2nd line");
goto c;
a:
puts("1st line");
goto b;
}
```



The screenshot shows the Turbo C++ IDE with the same menu bar and toolbar. The main window displays the output of the program in a black editor. The output consists of three lines: "1st line", "2nd line", and "3rd line", printed in reverse order. The status bar at the bottom indicates "Page: 8" and the system clock shows 4:57 PM on 08-Jun-22.

```
1st line
2nd line
3rd line
```

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



if: It is a decision making statement.

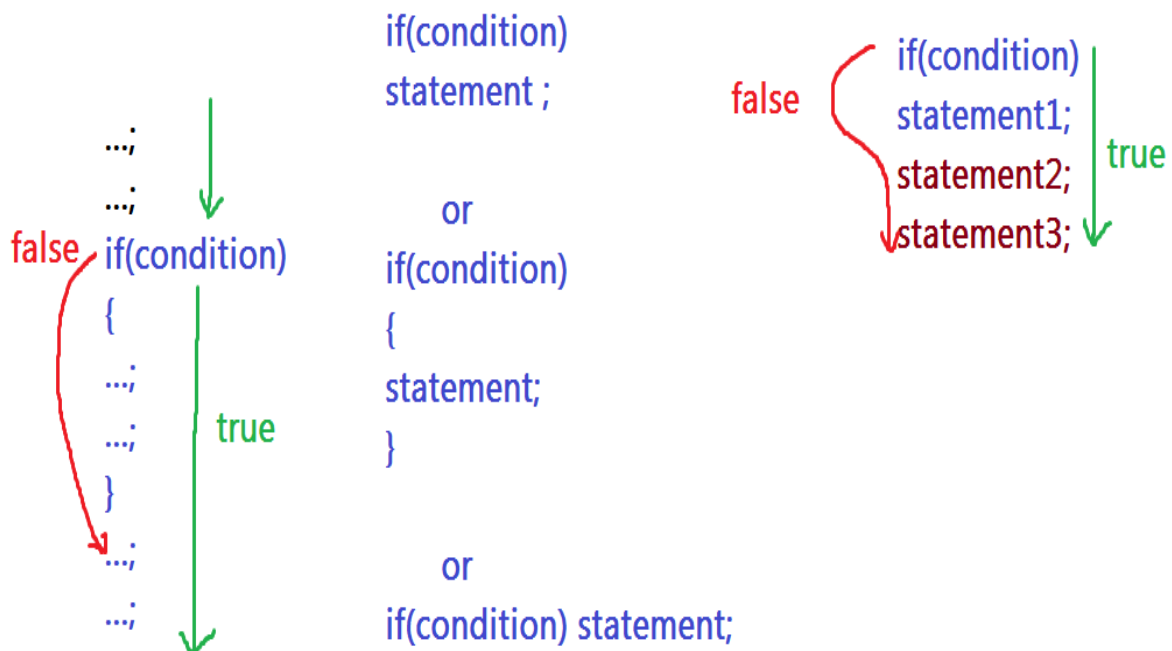
It is used to check the given condition is true or false.

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

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

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

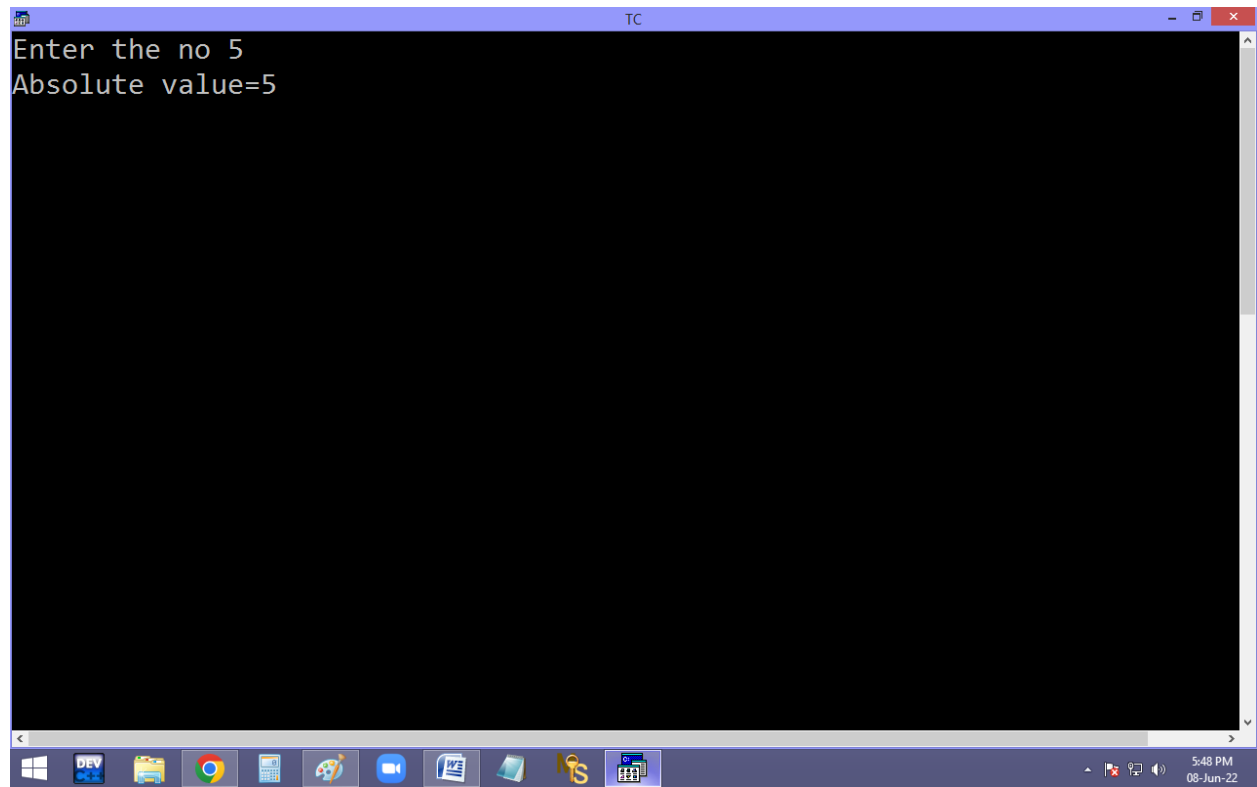
If condition false only the outside statements are working.



Eg. finding absolute value of given no [always +ve].

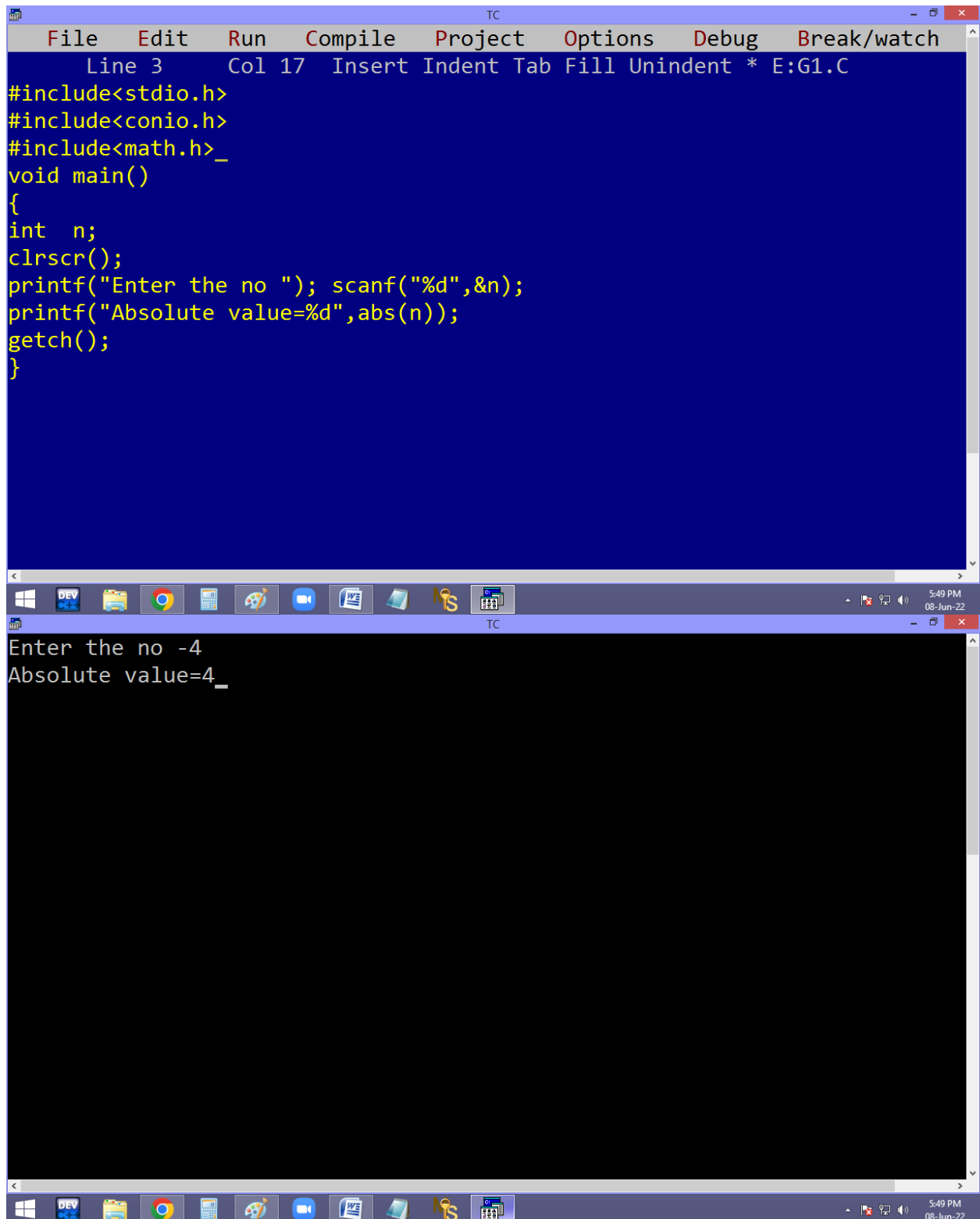
```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 9 Insert Indent Tab Fill Unindent * E:G1.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter the no "); scanf("%d",&n);
if(n<0) n=-n;
printf("Absolute value=%d",n);
getch();_
}
```

Enter the no -5
Absolute value=5_



The image shows a screenshot of a Turbo C++ (TC) window. The window has a title bar with the text "TC" and standard Windows window controls (minimize, maximize, close). The main area of the window is black and contains the following text in white: "Enter the no 5" and "Absolute value=5". The window is positioned on a Windows desktop. The taskbar at the bottom shows several icons: the Windows Start button, a folder icon, the Google Chrome icon, a calculator icon, a paint icon, a video chat icon, a document icon, a folder icon, a folder icon, and a folder icon. The system tray on the right side of the taskbar shows the time "5:48 PM" and the date "08-Jun-22".

Using abs():



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 3 Col 17 Insert Indent Tab Fill Unindent * E:G1.C
#include<stdio.h>
#include<conio.h>
#include<math.h>_
void main()
{
int n;
clrscr();
printf("Enter the no "); scanf("%d",&n);
printf("Absolute value=%d",abs(n));
getch();
}
```

Enter the no -4
Absolute value=4_


```
TC
Enter the no 4
Absolute value=4_
```

