

TC

File Edit Run Compile Project Options Debug Break/watch
Line 4 Col 62 Insert Indent Tab Fill Unindent * E:11AM.C

```
#include<stdio.h> #include<conio.h>
void main()
{
float sales, basic=10000,da=basic*72.5/100,bonus,comm,gross; clrscr();
printf("Enter sales amount "); scanf("%f",&sales);
if(sales>=10000){bonus=10000; comm=sales*10/100;}
else {bonus=3000; comm=sales*5/100;}
printf("Basic=% .2f\n",basic);
printf("Da=% .2f\n",da);
printf("Bonus=% .2f\n",bonus);
printf("Comm=% .2f\n",comm);
gross = basic + da + bonus + comm;
printf("Gross=% .2f",gross);
getch();
}
```

Enter sales amount 100000
Basic=10000.00
Da=7250.00
Bonus=10000.00
Comm=10000.00
Gross=37250.00

11:20 AM 01-Jul-24

```
Enter sales amount 99999
Basic=10000.00
Da=7250.00
Bonus=3000.00
Comm=4999.95
Gross=25249.95
```

TC

File Edit Run Compile Project Options Debug Break/watch

Error: Misplaced else in function main

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 1.1 )
printf("a");
printf("b");
else
printf("c");
printf("d");
getch();
}
```

Line 17 Col 10 Insert Indent Tab Fill Unindent * E:11AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 1.1 )
{
printf("a");
printf("b");
}
else
printf("c");
printf("d");
getch();
}
/* abd */
```

11:24 AM
01-Jul-24

TC

Line 17 Col 10 Insert Indent Tab Fill Unindent * E:11AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 1.1 )
{
printf("a");
printf("b");
}
else
printf("c");
printf("d");
getch();
}
/* abd */
```

11:25 AM
01-Jul-24

The image displays a Windows desktop environment with two terminal windows open in Tera Term. Both windows have a yellow title bar labeled 'TC'.

Top Terminal Window:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 1.1 )
{
printf("a");
printf("b");
}
else
{
printf("c");
printf("d");
}
getch();
}
/* ab */
```

Bottom Terminal Window:

```
Error: Misplaced else in function main
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 1.1 ) ;
{
printf("a");
printf("b");
}
else_
{
printf("c");
printf("d");
}
getch();
}
```

The taskbar at the bottom of the screen shows several icons, including File Explorer, Edge, and File History. The system tray indicates the date as 01-Jul-24 and the time as 11:26 AM.

The image shows a Windows desktop environment with two identical windows of a C compiler (TURBO C) running side-by-side. Both windows display the same C code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if( 1.1 )
{
printf("a");
printf("b");
}
else ;
{
printf("c");
printf("d");
}
getch();
}
/* abcd */
```

The windows have a standard Windows title bar with icons for minimizing, maximizing, and closing. Below the title bar is a menu bar with options: File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the bottom of each window shows the current line and column (Line 1 Col 19), the file name (E:11AM.C), and the date and time (11:28 AM 01-Jul-24). The taskbar at the bottom of the screen also displays icons for various applications, including the Start button, Internet Explorer, File Explorer, and other system icons.

The image shows a Windows desktop environment with two terminal windows side-by-side. Both windows have a dark blue background and white text.

Top Window (Original Code):

```
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if( "false" )
{
printf("a");
printf("b");
}
else
{
printf("c");
printf("d");
}
getch();
}
/* ab */
```

Bottom Window (Fixed Code):

```
Line 17 Col 6 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if( "" )
{
printf("a");
printf("b");
}
else
{
printf("c");
printf("d");
}
getch();
}
/* ab */
```

The status bar at the bottom of each window displays the following information:

- Top window: Line 17 Col 6 Insert Indent Tab Fill Unindent * E:11AM.C
- Bottom window: Line 17 Col 6 Insert Indent Tab Fill Unindent * E:11AM.C
- Both windows show the date and time: 01-Jul-24

The image shows two side-by-side windows of the Windows Notepad application. Both windows display the same C program code. The code includes standard library includes, a main function with an if-else block printing 'a' or 'c', and a getch call. There are two comments at the bottom: /* cd */ in the top window and /* ab */ in the bottom window. The windows have identical titles 'TC' and status bars showing the file name 'E:11AM.C', line 9/17, column 6, and the date/time '01-Jul-24'. The taskbar at the bottom shows various icons for common Windows applications like File Explorer, Internet Explorer, and File Manager.

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

```

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

```

```
TC
Error: Misplaced else in function main
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
else_
{
printf("c");
printf("d");
}
getch();
}
```

```
TC
Error: Misplaced else in function main
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if(5)printf("Hi");
else printf("Hello");
else printf("Bye");
getch();
}
```

```
TC
Error: Misplaced else in function main
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if(5)
else printf("Hello");
getch();
}

File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 10 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if(5);
else printf("Hello");
getch();
}

/* Blank screen */
```

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 8 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if(5); else printf("Hello"); printf("Bye");
getch();
}

/* Bye`_*/
```

```
TC
File Edit Run Compile Project Options Debug Break/watch
Error: Misplaced else in function main
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if(5 && 5 == 5);printf("Hello"); else_printf("Bye");
getch();
}

/* Error */
```

```
#include<stdio.h> #include<conio.h>
void main()
{
clrscr();
if(5 && 5 == 5) printf("Hello\n"); else printf("Bye");
if((5 && 5) == 5) printf("Hello"); else printf("Bye");
getch();
}
```

Hello
Bye_

The diagram illustrates the evaluation of a C expression using green and red annotations:

Green annotations:

- A green bracket groups the entire expression `(5 && 5) == 5`.
- A green bracket groups the operator `&&`.
- A green arrow points from the green bracket around `(5 && 5) == 5` to the `if` keyword.

Red annotations:

- A red bracket groups the operator `&&`.
- A red bracket groups the expression `5 == 5`.
- A red arrow points from the red bracket around `5 == 5` to the `else` keyword.

The annotated code is:

```
if( (5 && 5) == 5 ) p("Hello"); else p("Bye");
```

TC

File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 24 Insert Indent Tab Fill Unindent * E:11AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
float a=1.0;
clrscr();
if(a == 1.0) puts("True"); else puts("False");
a=1.5;
if(a == 1.5) puts("True"); else puts("False");
a=1.1;
if(a == 1.1) puts("True"); else puts("False");
a=9.9;
if(a == 9.9) puts("True"); else puts("False");
getch();
}
```

True
True
False
False

TC

File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 13 Insert Indent Tab Fill Unindent * E:11AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
float a=1.0;
clrscr();
if(a == 1.0) puts("True"); else puts("False");
a=1.5;
if(a == 1.5) puts("True"); else puts("False");
a=1.1;
if(a == 1.1f) puts("True"); else puts("False");
a=9.9;
if(a == 9.9f) puts("True"); else puts("False");
getch();
}
```

True
True
True
True

11:45 AM
01-Jul-24

TC

11:46 AM
01-Jul-24

Line 17 Col 13 Insert Indent Tab Fill Unindent * E:11AM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
float a=1.0;
double b=1.0;
clrscr();
printf("a=% .10f, b=% .10f\n",a,b);
a=1.5; b=1.5;
printf("a=% .10f, b=% .10f\n",a,b);
a=1.1; b=1.1;
printf("a=% .10f, b=% .10f\n",a,b);
a=9.9; b=9.9;
printf("a=% .10f, b=% .10f\n",a,b);
getch();
}
```

a=1.0000000000, b=1.0000000000
a=1.5000000000, b=1.5000000000
a=1.100000238, b=1.1000000000
a=9.8999996185, b=9.9000000000

The screenshot shows a Windows desktop environment with two identical windows of a C compiler application side-by-side. Both windows have a title bar 'TC' and a menu bar with 'File', 'Edit', 'Run', 'Compile', 'Project', 'Options', 'Debug', and 'Break/watch'. The status bar at the bottom of each window displays 'Line 11 Col 11 Insert Indent Tab Fill Unindent * E:11AM.C'. The code in both windows is identical:

```
#include<stdio.h>
#include<conio.h>
void main()
{
float a=1.1;
double b=1.1;
clrscr();
if(a>b)puts("True");else puts("False");
getch();
}
/* True */
```

The screenshot shows the same Windows desktop environment with the two compiler windows again. The status bar at the bottom of the left window now displays 'Line 7 Col 14 Insert Indent Tab Fill Unindent * E:11AM.C'. The code remains the same as in the previous screenshot.

```
#include<stdio.h>
#include<conio.h>
void main()
{
float a=1.1;
clrscr();
if(sizeof(a)>1.1)puts("True");else puts("False");
getch();
}
/* True */
```

The image shows a Windows operating system desktop environment. At the top, there is a taskbar with various icons. In the center, a terminal window titled "TC" is open, displaying the word "False". Below the terminal is a code editor window also titled "TC". The code editor displays the following C program:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a=32770;
clrscr();
printf("a=%d\n",a);
if(a>32767)puts("True");else puts("False");
getch();
}
/* False */
```

The code editor's status bar indicates "Line 7 Col 20 Insert Indent Tab Fill Unindent * E:11AM.C". The taskbar at the bottom shows the date and time as "11:53 AM 01-Jul-24".

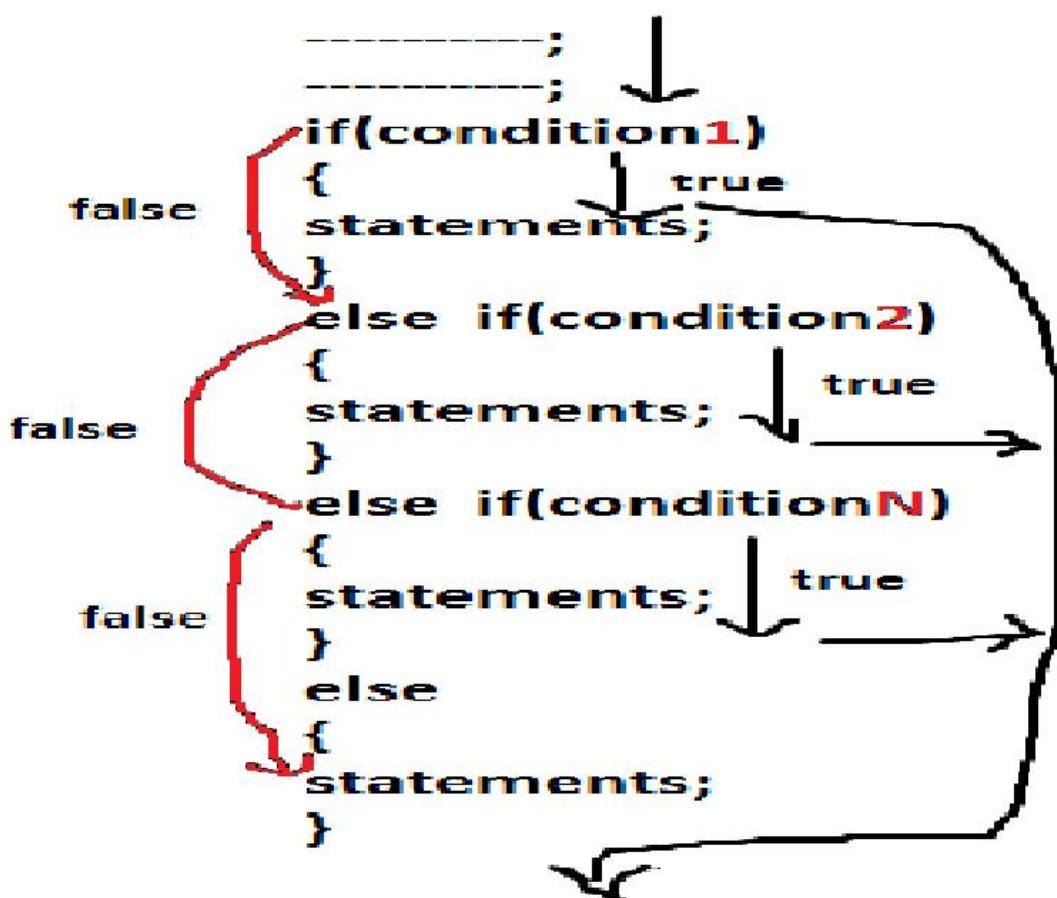
```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 6 Col 1 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if(sizeof(32768)==sizeof(50000))puts("True");else puts("False");
getch();
}
/* true */
```

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 9 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if(sizeof(32768)==sizeof(1.5))puts("True");else puts("False");
if(sizeof(32768)==sizeof(1.5f))puts("True");else puts("False");
getch();
}
/* false
   true_ */
```



If..else if / ladder if:

When the program contain 3 or more options and user have to select 1 then go for if else if ladder. In if..else if the conditions are tested from top to bottom one by one like the ladder steps and any one condition is true then statements in that if block are executed and program execution jumped to outside the if series. If no condition true then statements in else are executed. Here else is optional.



Finding +Ve / -Ve / 0:

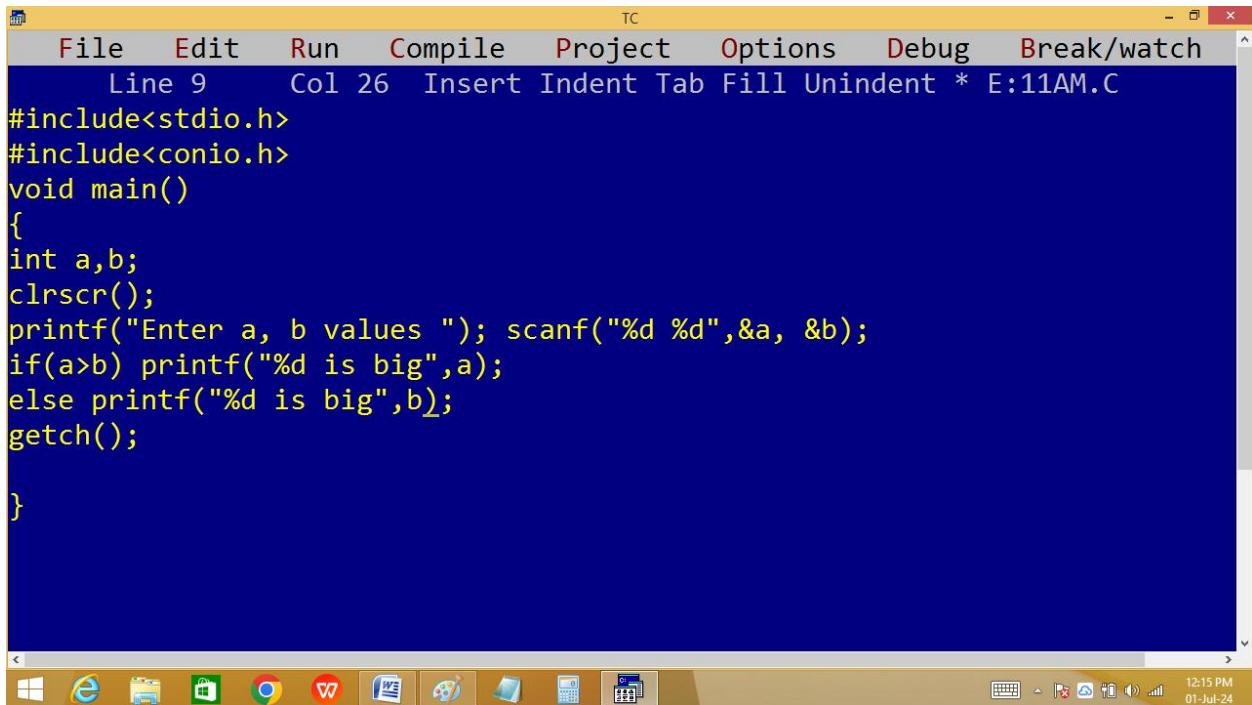
```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 7 Col 25 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter the no ");_scanf("%d",&n);
if(n>0) puts("+Ve");
else if(n<0) puts("-Ve");
else puts("Zero");
getch();
}
```

```
TC
Enter the no 4
+Ve
```

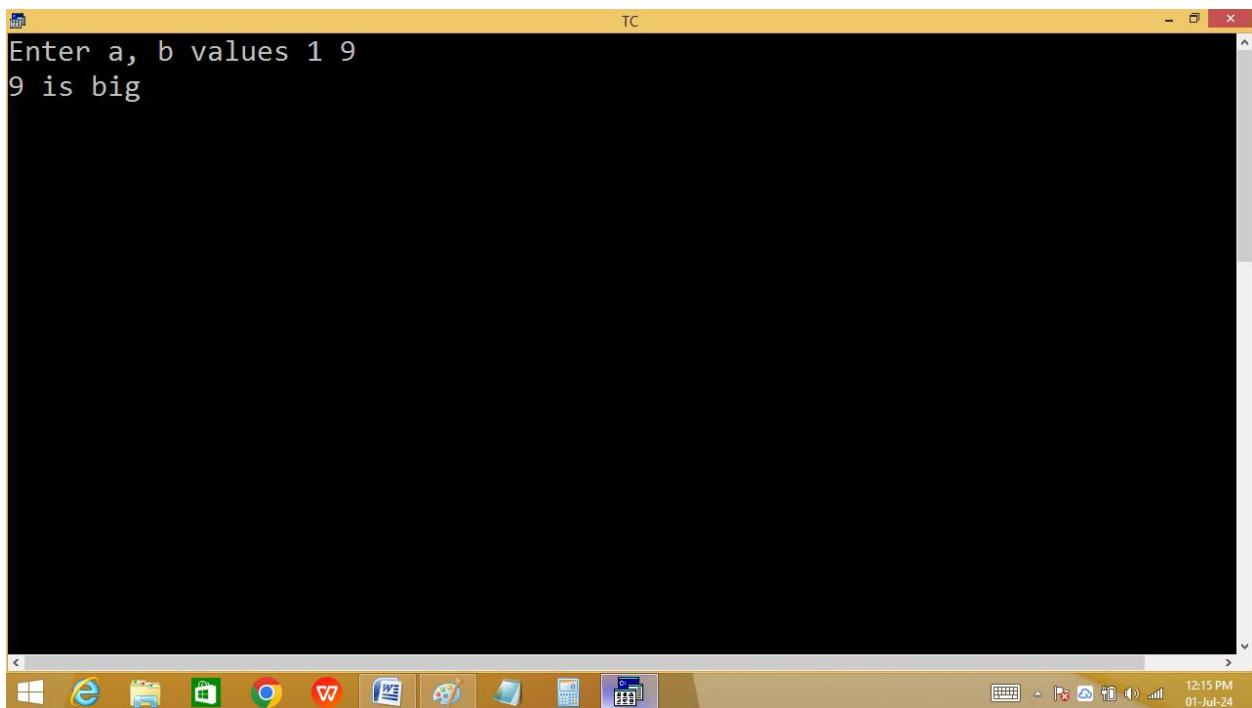
```
TC
Enter the no -2
-Ve
```

```
TC
Enter the no -0
Zero
```

Finding max in 2 numbers:



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 26 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter a, b values "); scanf("%d %d",&a, &b);
if(a>b) printf("%d is big",a);
else printf("%d is big",b);
getch();
}
```



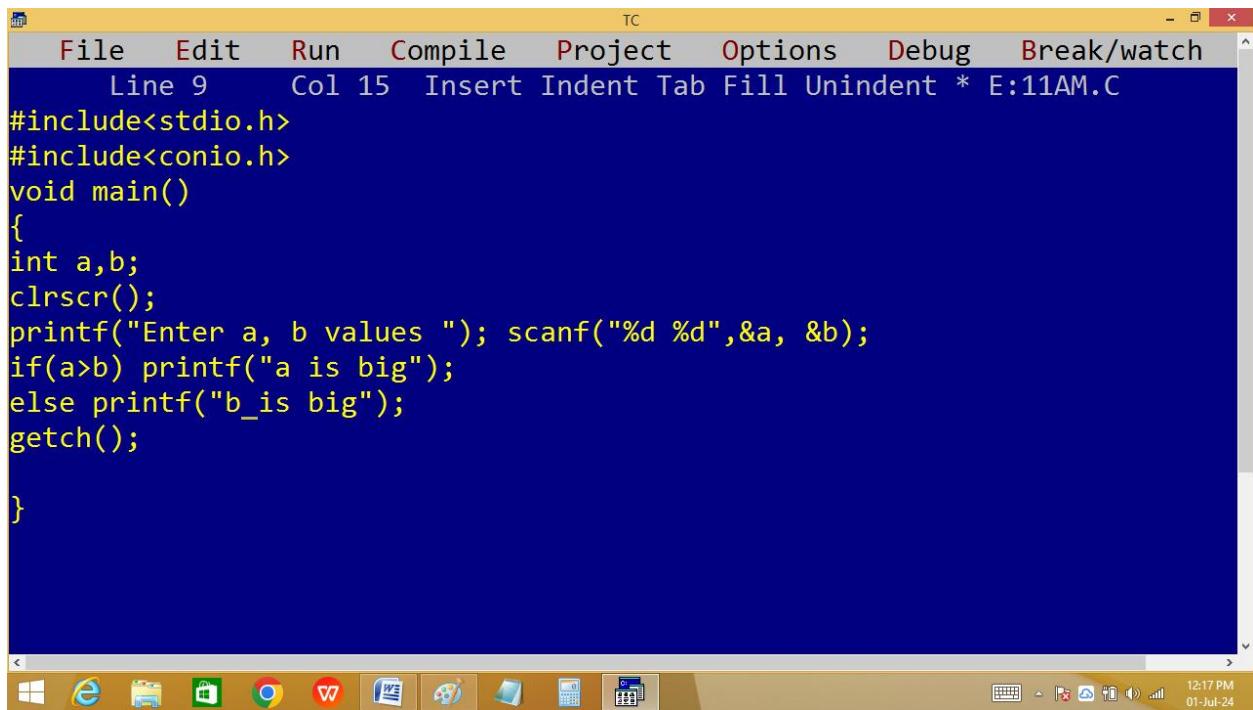
```
TC
Enter a, b values 1 9
9 is big
```

```
TC
Enter a, b values 3 1
3 is big
```

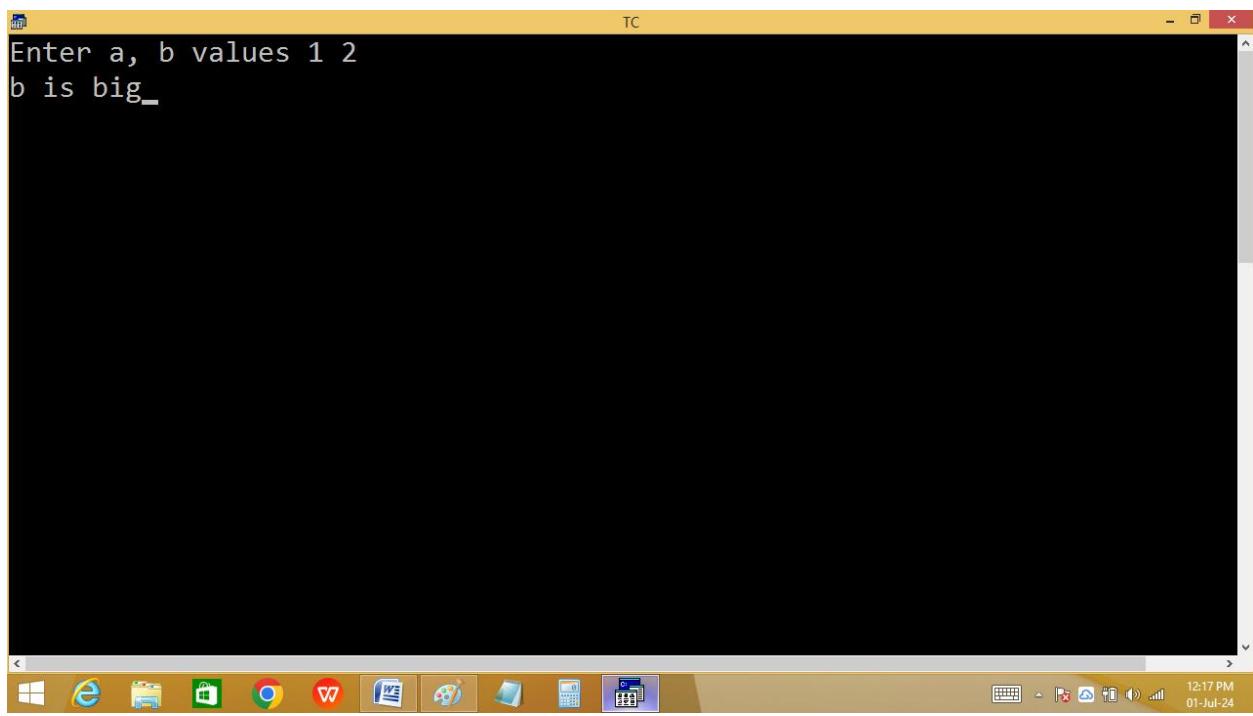


```
TC
Enter a, b values 3 3
3 is big
```





```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 15 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter a, b values "); scanf("%d %d",&a, &b);
if(a>b) printf("a is big");
else printf("b_is big");
getch();
}
```



```
TC
Enter a, b values 1 2
b is big_
```

```
TC
Enter a, b values 5 1
a is big
```

```
TC
Enter a, b values 5 1
a is big_
```

TC

```
Enter a, b values 4 4
b is big_
```

The image shows a Windows operating system desktop. A terminal window titled "TC" is open, displaying the text "Enter a, b values 4 4" followed by "b is big_". The terminal has a black background and white text. Below the terminal is a standard Windows taskbar with icons for File Explorer, Edge, and other applications. The system tray on the right side of the taskbar shows the date and time as "12:17 PM 01-Jul-24".

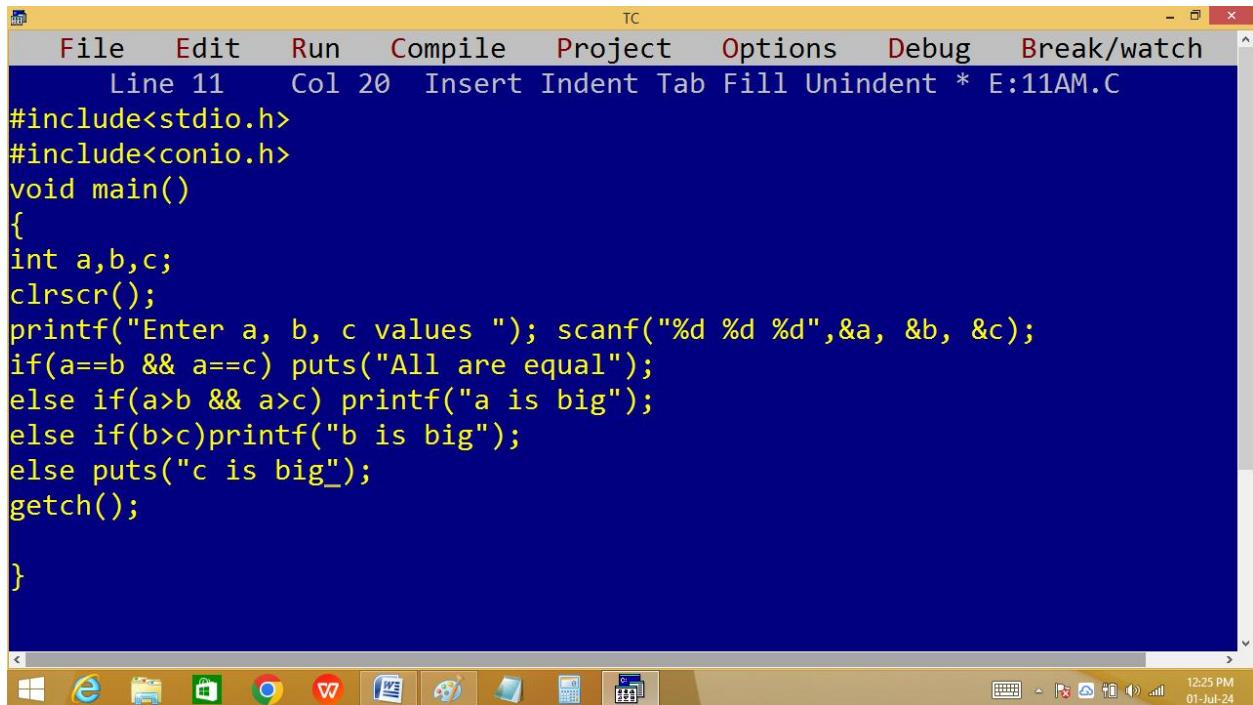
The screenshot shows the Turbo C++ IDE interface. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the bottom indicates Line 10, Col 29, Insert, Indent, Tab, Fill, Unindent, * E:11AM.C. The code editor contains the following C program:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter a, b values ");
scanf("%d %d",&a, &b);
if(a>b) printf("a is big");
else if(b>a)printf("b is big");
else puts("Both are equal");
getch();
}
```

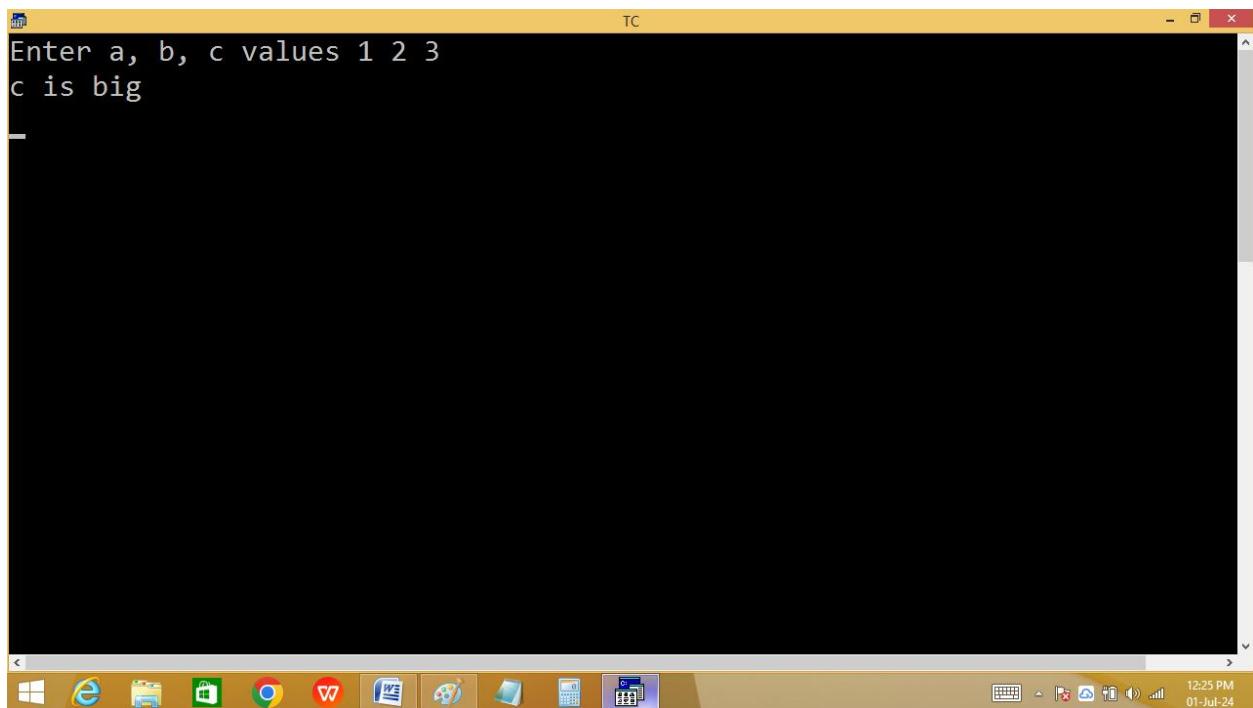
The screenshot shows a terminal window with a black background. The command prompt "TC" is at the top. The window displays the output of the C program:

```
Enter a, b values 4 4
Both are equal
```

Finding max in 3 no's:



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 20 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c;
clrscr();
printf("Enter a, b, c values "); scanf("%d %d %d",&a, &b, &c);
if(a==b && a==c) puts("All are equal");
else if(a>b && a>c) printf("a is big");
else if(b>c)printf("b is big");
else puts("c is big");
getch();
}
```



```
TC
Enter a, b, c values 1 2 3
c is big
```

```
TC
Enter a, b, c values 3 2 1
a is big
```



12:26 PM
01-Jul-24

```
TC
Enter a, b, c values 1 3 2
b is big
```



12:26 PM
01-Jul-24

```
TC
Enter a, b, c values 1 1 1
All are equal
```

```
TC
Line 17    Col 9    Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c;
clrscr();
printf("Enter a, b, c values "); scanf("%d %d %d",&a, &b, &c);
if(a==b && a==c) puts("All are equal");
else if(a>b && a>c) printf("a is big");
else if(a==b && a>c)puts("a & b are big");
else if(a==c && a>b) puts("a & c are big");
else if(b==c && b>a) puts("b & c are big");
else if(b>c)printf("b is big");
else puts("c is big");
getch();
}
```

```
TC
Enter a, b, c values 3 3 3
All are equal
```



12:29 PM
01-Jul-24

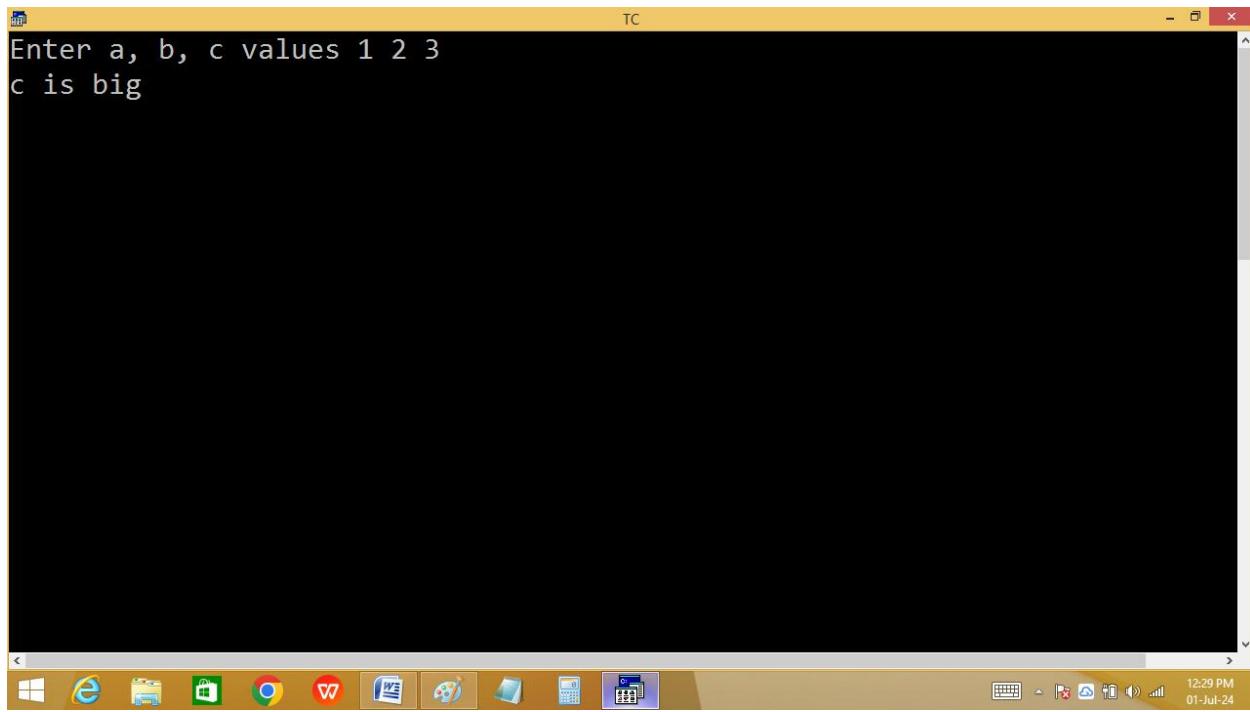
```
TC
Enter a, b, c values 1 2 2
b & c are big
```



12:29 PM
01-Jul-24

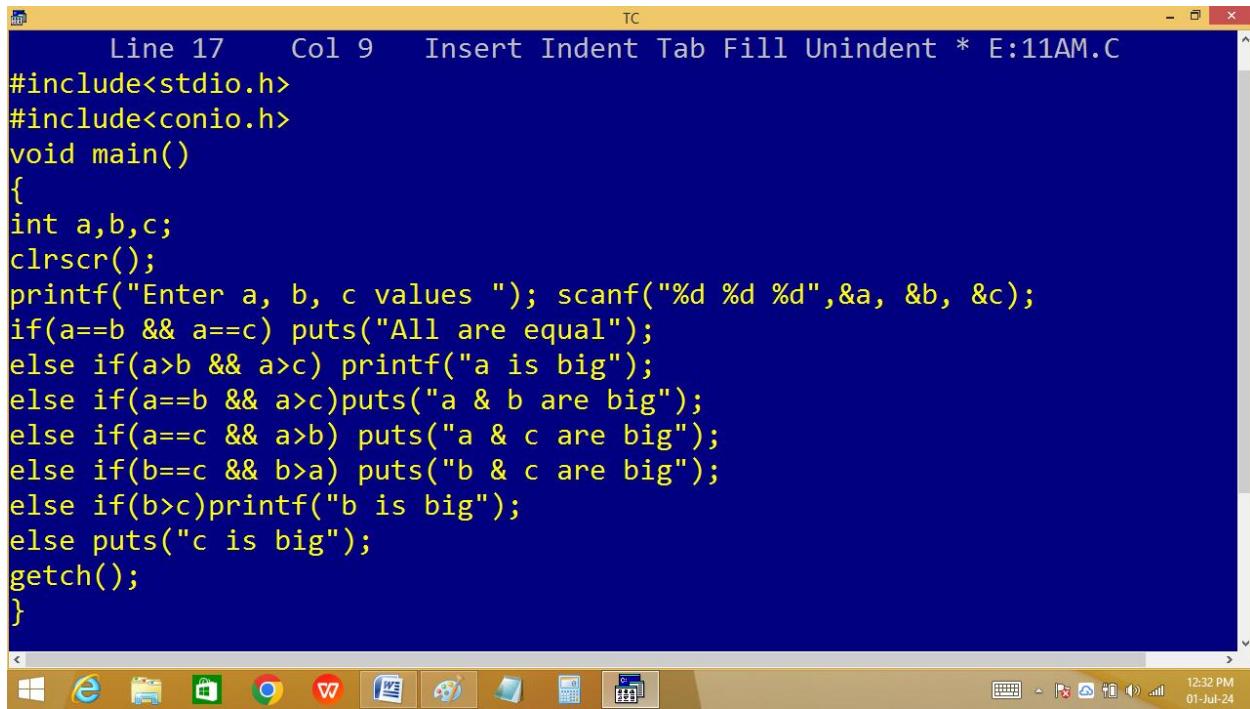
```
TC
Enter a, b, c values 3 1 3
a & c are big
```

```
TC
Enter a, b, c values 2 2 1
a & b are big
```



```
Enter a, b, c values 1 2 3
c is big
```

Finding no of days in given month.



```
Line 17    Col 9    Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c;
clrscr();
printf("Enter a, b, c values "); scanf("%d %d %d",&a, &b, &c);
if(a==b && a==c) puts("All are equal");
else if(a>b && a>c) printf("a is big");
else if(a==b && a>c)puts("a & b are big");
else if(a==c && a>b) puts("a & c are big");
else if(b==c && b>a) puts("b & c are big");
else if(b>c)printf("b is big");
else puts("c is big");
getch();
}
```

```
TC
Enter the month no between 1-12  14
Invalid month
```



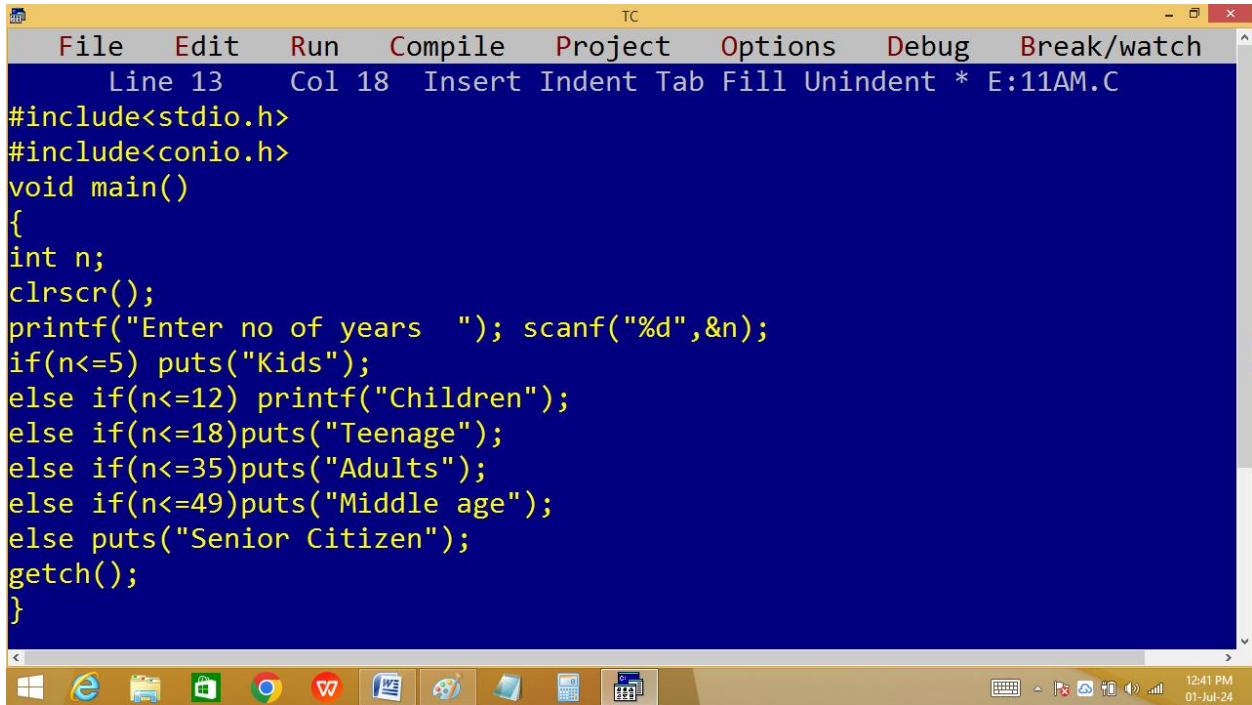
```
TC
Enter the month no between 1-12  2
28/29 days
```



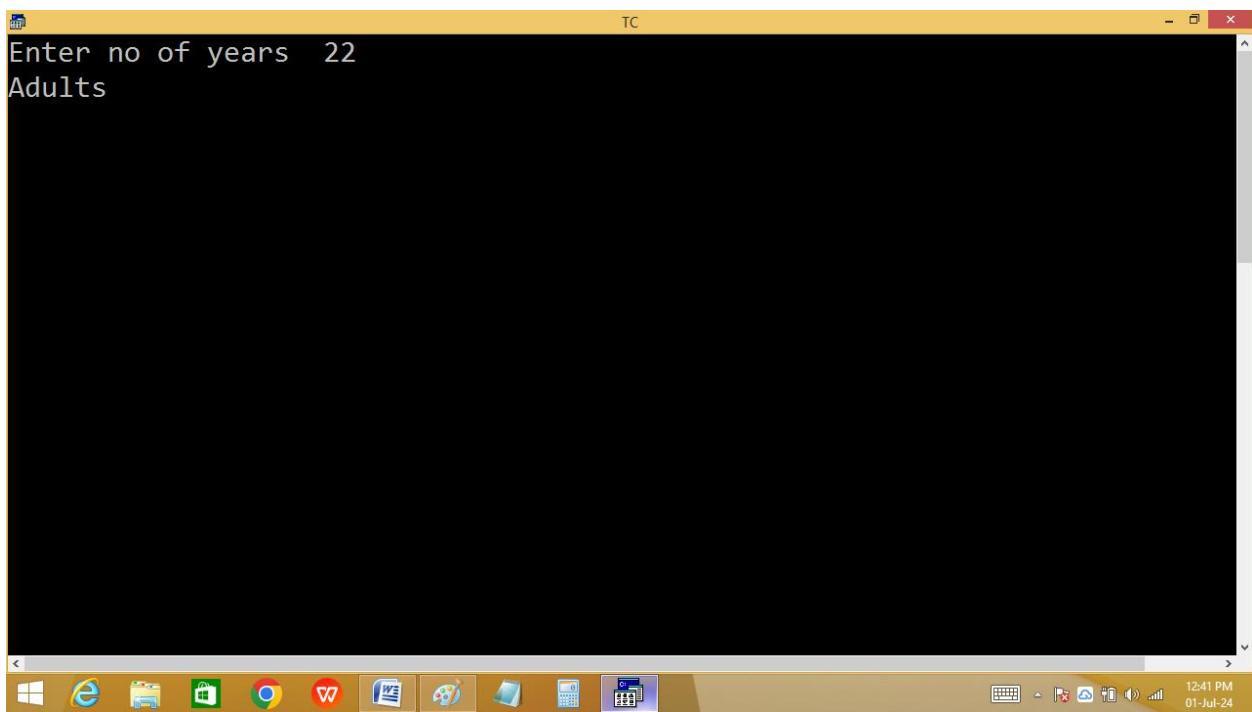
```
TC
Enter the month no between 1-12  4
30 days_
```

```
TC
Enter the month no between 1-12  3
31 days
```

Finding person stage:



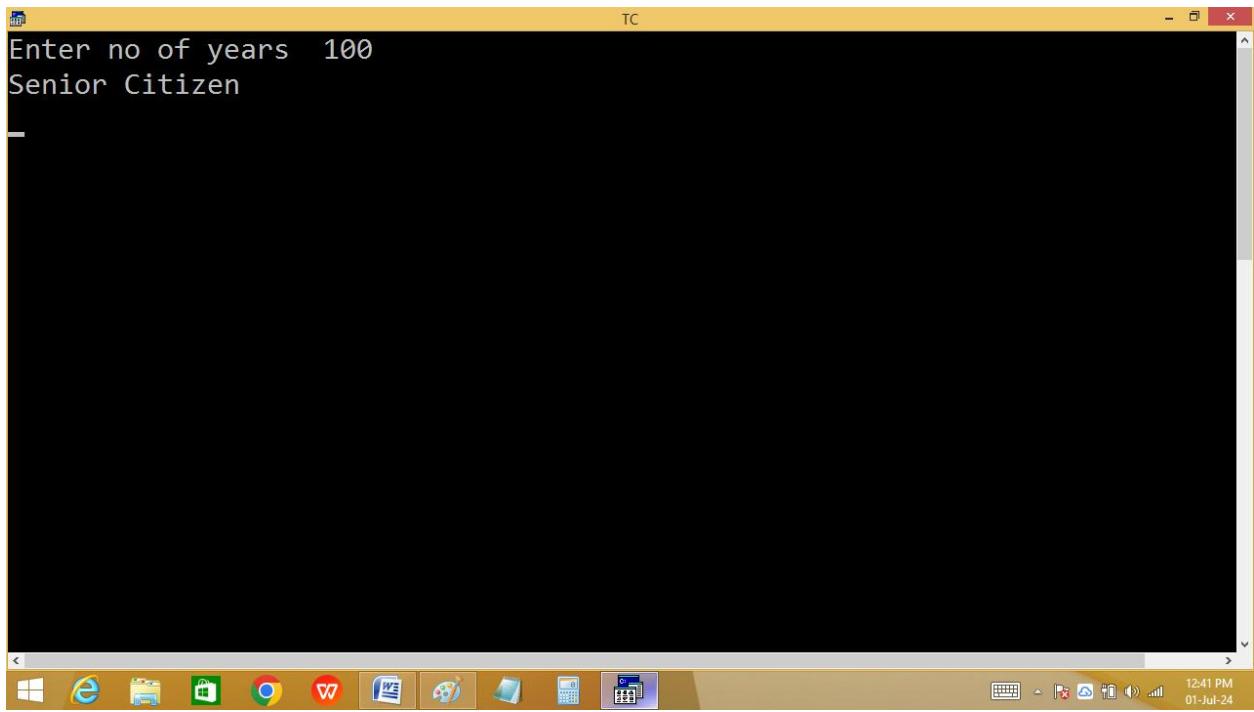
```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 18 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter no of years  "); scanf("%d",&n);
if(n<=5) puts("Kids");
else if(n<=12) printf("Children");
else if(n<=18)puts("Teenage");
else if(n<=35)puts("Adults");
else if(n<=49)puts("Middle age");
else puts("Senior Citizen");
getch();
}
```



```
TC
Enter no of years  22
Adults
```

```
TC
Enter no of years  3
Kids
```

```
TC
Enter no of years  49
Middle age
```



```
Enter no of years 100
Senior Citizen
```

Home work:

1. Finding lower / upper / digit / space / special char
2. Finding employee IT based on below table.

| Gross salary [12 months salary] | IT % on gross |
|---------------------------------|---------------|
| <700000 | 0% |
| <=1000000 | 12% |
| <=1500000 | 18% |
| >15000000 | 30% |

