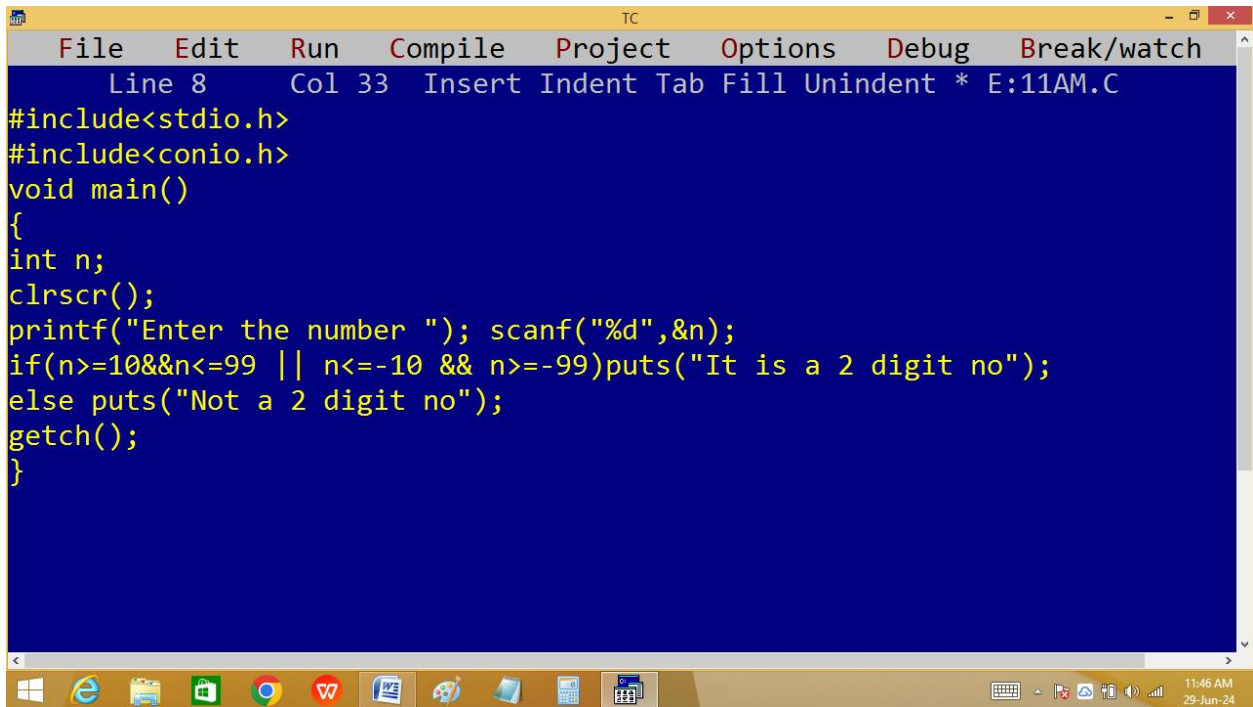


Finding 2 digit no or not:



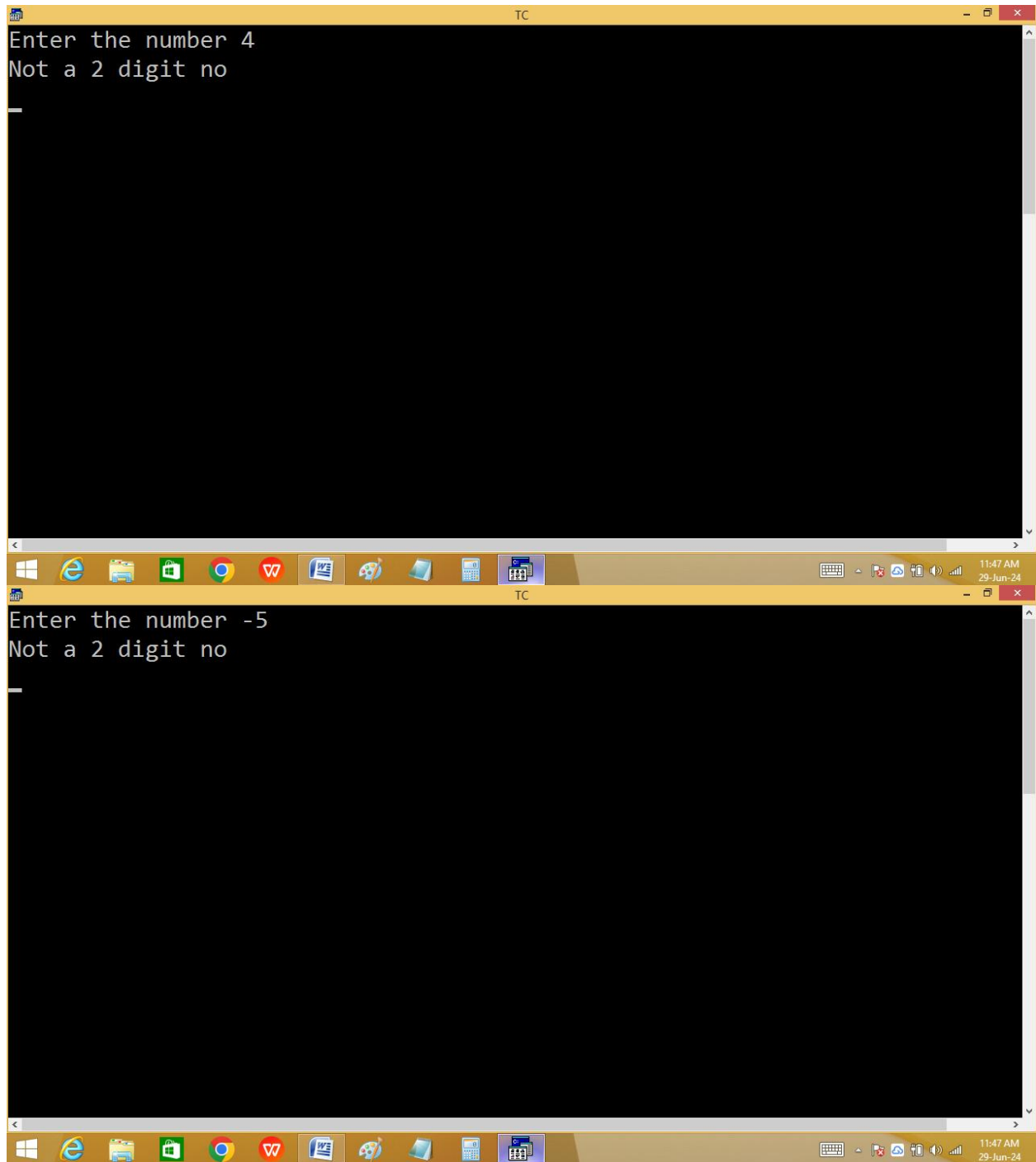
The screenshot shows a Turbo C++ (TC) IDE window. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 8', 'Col 33', and 'Insert Indent Tab Fill Unindent * E:11AM.C'. The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter the number "); scanf("%d",&n);
if(n>=10&& n<=99 || n<=-10 && n>=-99)puts("It is a 2 digit no");
else puts("Not a 2 digit no");
getch();
}
```

The Windows taskbar at the bottom shows various application icons, including the Start button, Internet Explorer, File Explorer, and several other programs. The system clock in the bottom right corner displays '11:46 AM' and '29-Jun-24'.

```
TC
Enter the number -45
It is a 2 digit no
```

```
TC
Enter the number 99
It is a 2 digit no
```



Finding special char or not.

The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays the source code of a C program. The code includes `<stdio.h>` and `<conio.h>`, and defines a `main` function. Inside `main`, it declares a `char c`, calls `clrscr()` to clear the screen, and uses `scanf` to read a character. A conditional statement checks if the character is an alphanumeric character (including space) or a digit. If not, it prints "It is not a special char"; otherwise, it prints "It is a Special char". The program then calls `getch()` and returns.

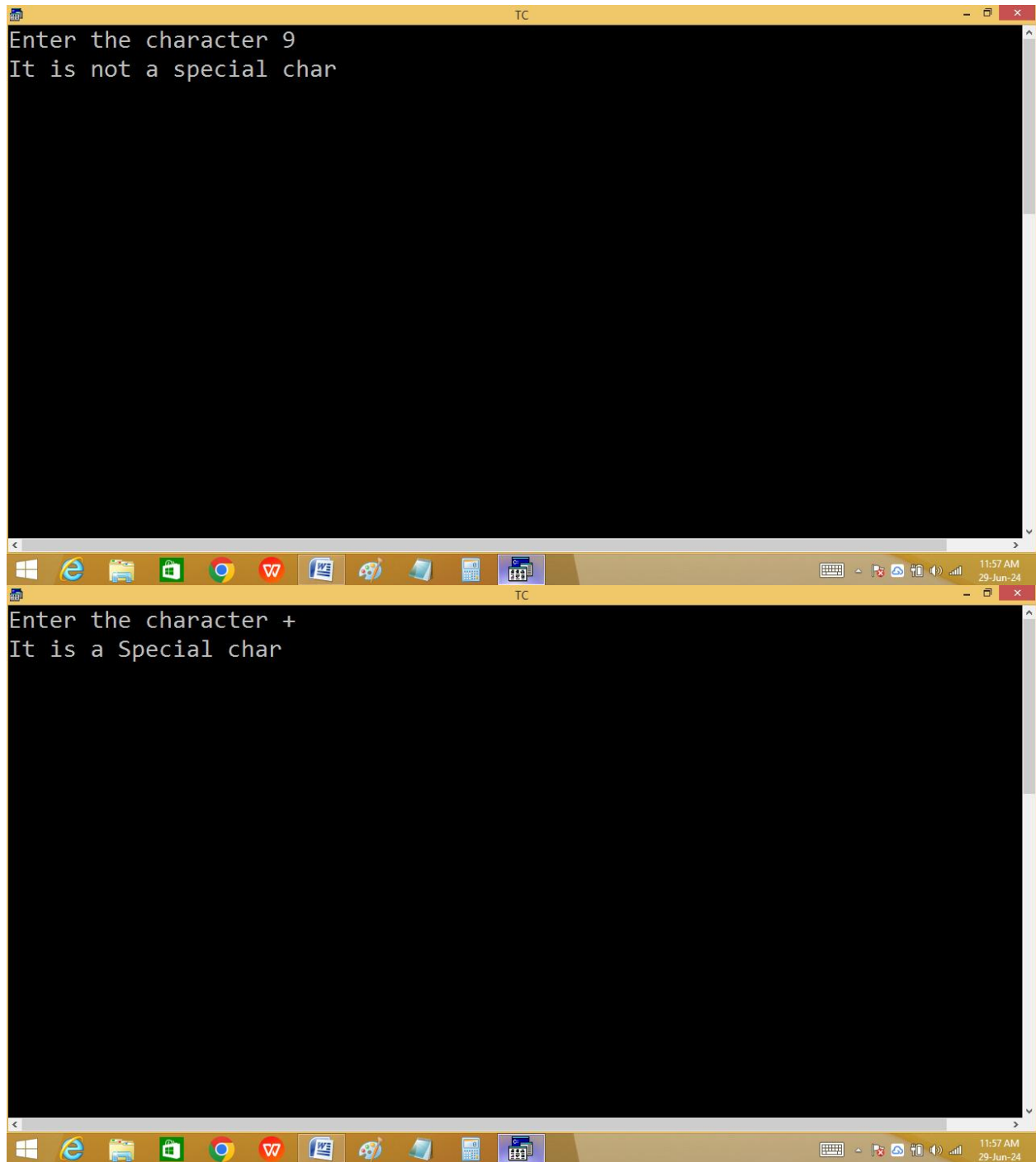
The bottom screenshot shows the program's execution. The prompt "Enter the character d" is displayed, and the output "It is not a special char" is shown. The Windows taskbar at the bottom of both screenshots indicates the date as 29-Jun-24 and the time as 11:56 AM and 11:57 AM.

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 32 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char c;
clrscr();
printf("Enter the character "); scanf("%c",&c);
if(c>='a' && c<='z' || c>='A'&& c<='Z' || c>='0'&& c<='9')
puts("It is not a special char");
else puts("It is a Special char");
getch();
}
```

Enter the character d
It is not a special char

```
TC
Enter the character #
It is a Special char
```

```
TC
Enter the character H
It is not a special char
```

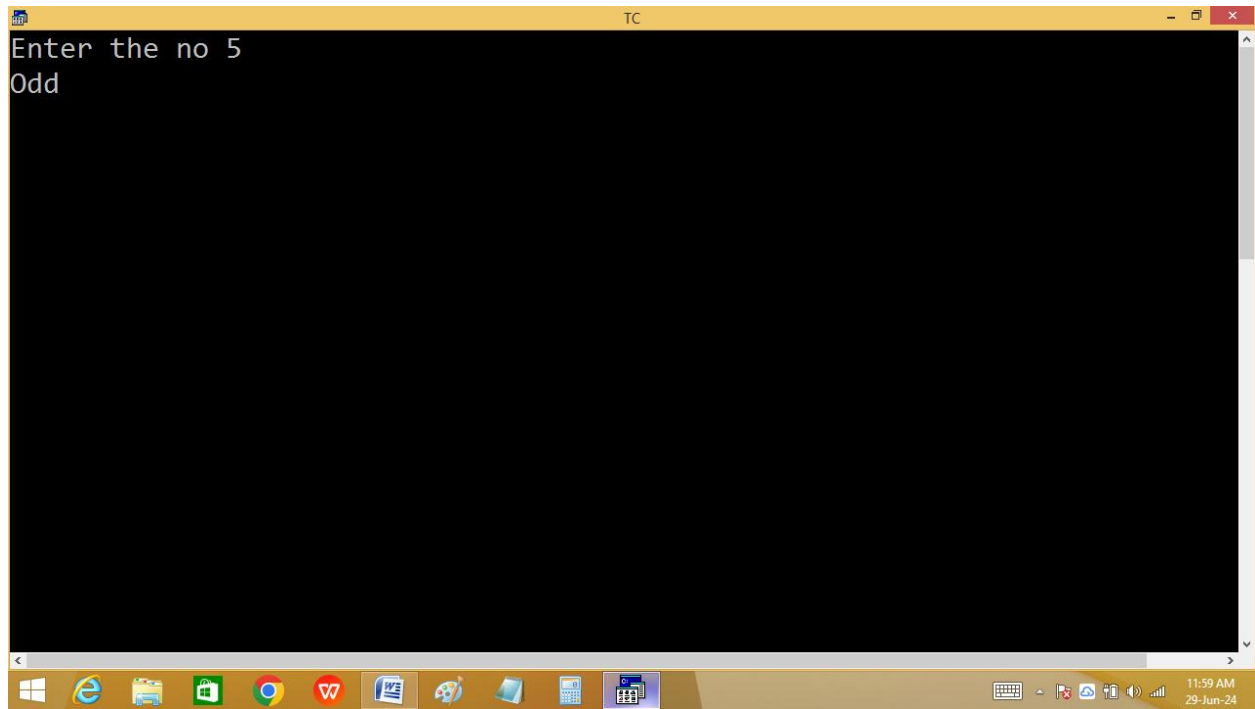


Finding even/odd:

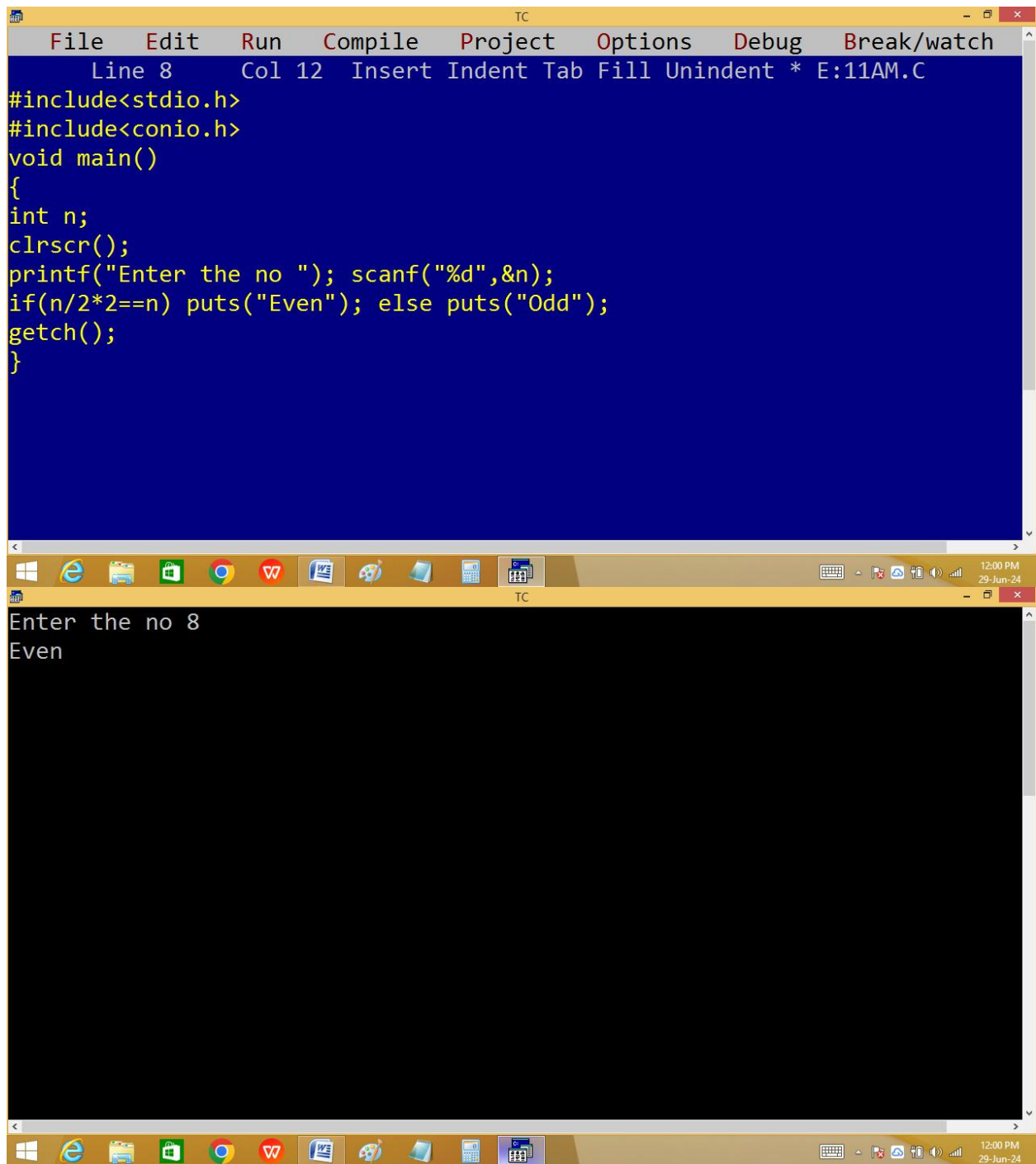
The image shows two windows from the Turbo C++ (TC) IDE. The top window is the code editor, titled 'TC', with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 8, Col 43, Insert, Indent, Tab, Fill, Unindent, * E:11AM.C). The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter the no "); scanf("%d",&n);
if(n%2==0) puts("Even"); else puts("Odd");
getch();
}
```

The bottom window is the output console, also titled 'TC'. It displays the program's execution: 'Enter the no 4' followed by 'Even' on the next line. The Windows taskbar at the bottom shows the date as Saturday, 29 June, 2024, and the time as 11:59 AM.




Without using %:



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 12 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/2*2==n) puts("Even"); else puts("Odd");
getch();
}
```

Enter the no 8
Even

```
TC
Enter the no 9
Odd
```

$4/2=2*2=4==4$ 

if($n/2 * 2 == n$) p(even); else p(odd);

$5/2=2*2=4==5$ 

Without using arithmetic operators:

The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays the source code of a C program designed to check if a number is even or odd. The code includes headers for `stdio.h` and `conio.h`, and uses `clrscr()` to clear the screen. It prompts the user to 'Enter the no' and uses `scanf` to read an integer. A conditional statement `if((n&1)==0)` checks for evenness, printing 'Even' or 'Odd' accordingly, followed by `getch()` to pause the program.

```
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 9 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&1)==0) puts("Even"); else puts("Odd");
getch();
}
```

The bottom screenshot shows the program's execution. The prompt 'Enter the no' is followed by the input '4'. The program then outputs 'Even'.

```
Enter the no 4
Even
```

```
TC
Enter the no 5
Odd
```

if(4 & 1 == 0) p("Even");

4=100
1=001
000=0

if(3 & 1 == 0) p(even); else p(odd);

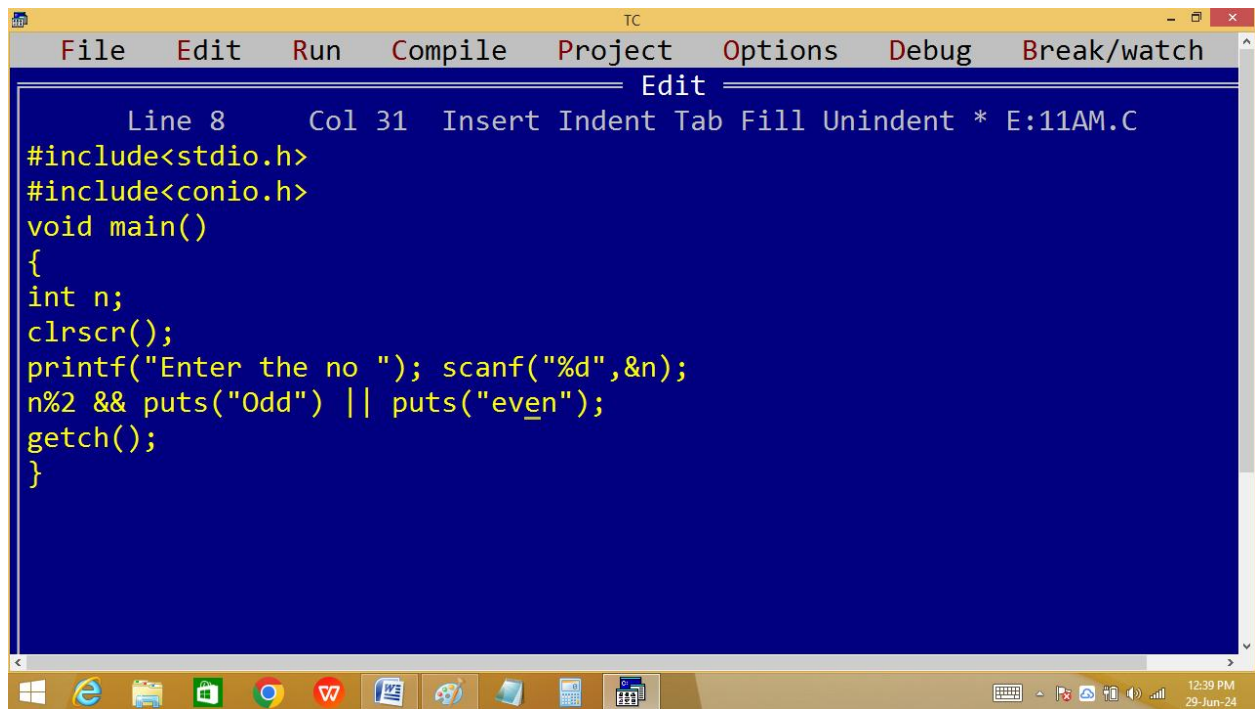
3=11
1=01
01=1

$$\begin{array}{r} 2 \overline{) 3} \\ 1-1 \end{array}$$

$$\begin{array}{r} 2 \overline{) 4} \\ 2-0 \\ 1-0 \end{array}$$

Finding even/odd without using if..else or ternary:

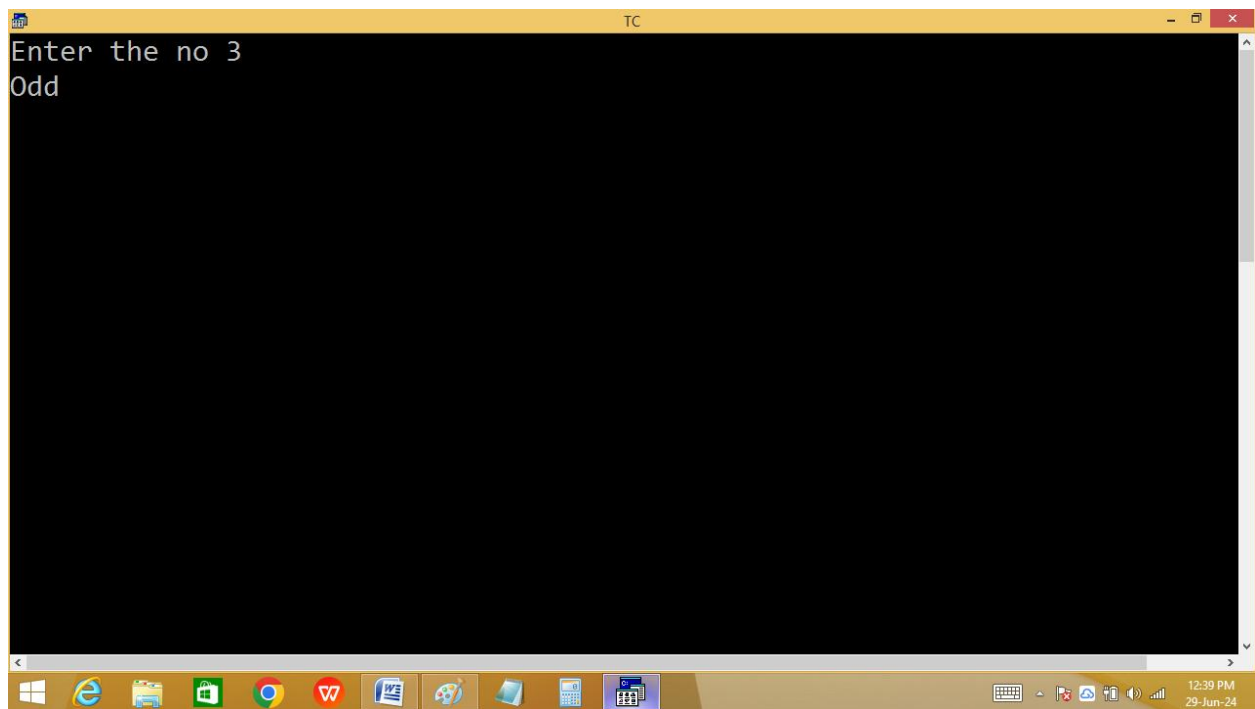
puts(n%2 && "Odd" || "Even");



The screenshot shows the Turbo C++ (TC) IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a toolbar. The main window is titled "Edit" and displays the following C code:

```
Line 8      Col 31  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);
    n%2 && puts("Odd") || puts("even");
    getch();
}
```

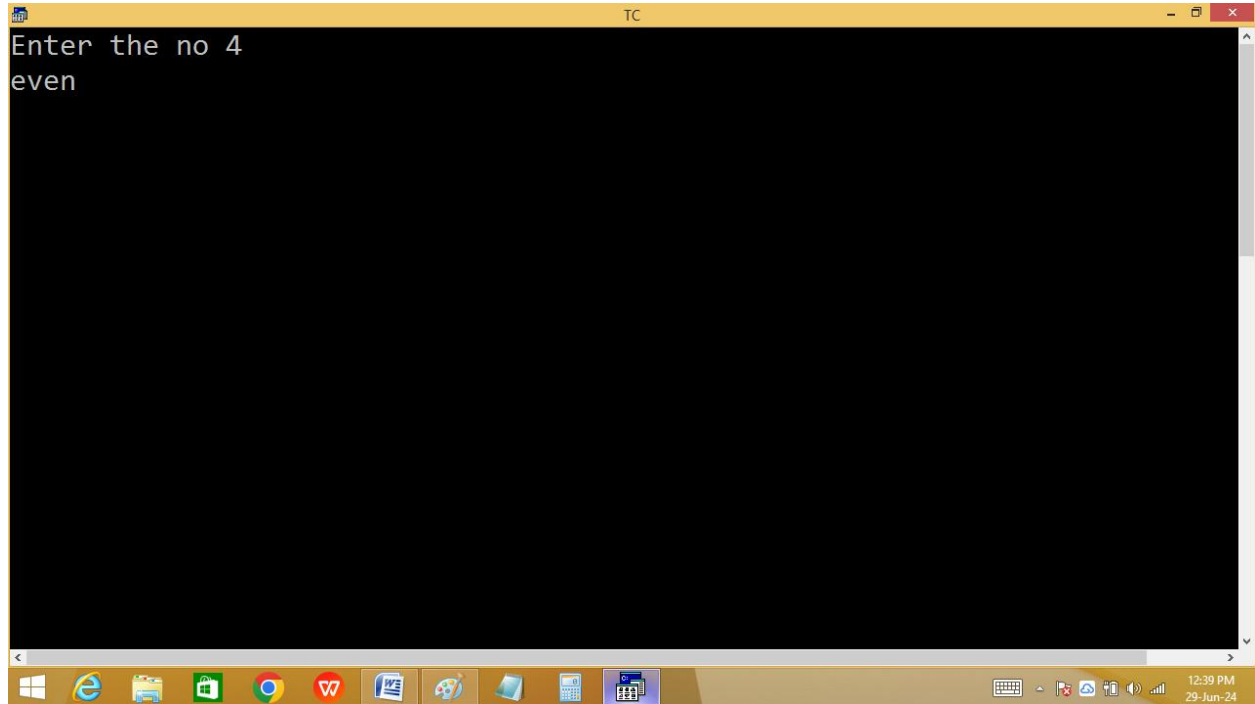
The Windows taskbar at the bottom shows the time as 12:39 PM on 29-Jun-24.



The screenshot shows the Turbo C++ (TC) IDE with the same menu bar and toolbar. The main window now displays the program's output:

```
Enter the no 3
Odd
```

The Windows taskbar at the bottom shows the time as 12:39 PM on 29-Jun-24.



Print the table without using loop:

For example 2nd table

$$2*1=2$$

$$2*2=4$$

....

....

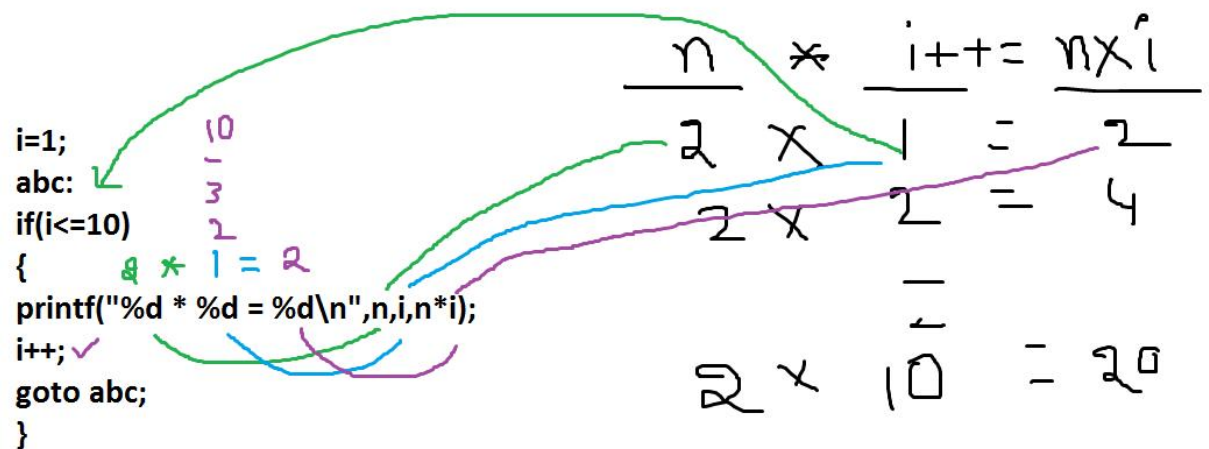
$$2*10=20$$

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i=1;
clrscr();
printf("Enter table no "); scanf("%d",&n);
abc:
if(i<=10)
{
printf("%d * %d = %d\n",n, i, n*i);
i++;
goto abc;
}
getch();
}
```

Enter table no 2

```
2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
2 * 4 = 8
2 * 5 = 10
2 * 6 = 12
2 * 7 = 14
2 * 8 = 16
2 * 9 = 18
2 * 10 = 20
```

```
TC
Enter table no 9
9 * 1 = 9
9 * 2 = 18
9 * 3 = 27
9 * 4 = 36
9 * 5 = 45
9 * 6 = 54
9 * 7 = 63
9 * 8 = 72
9 * 9 = 81
9 * 10 = 90
```



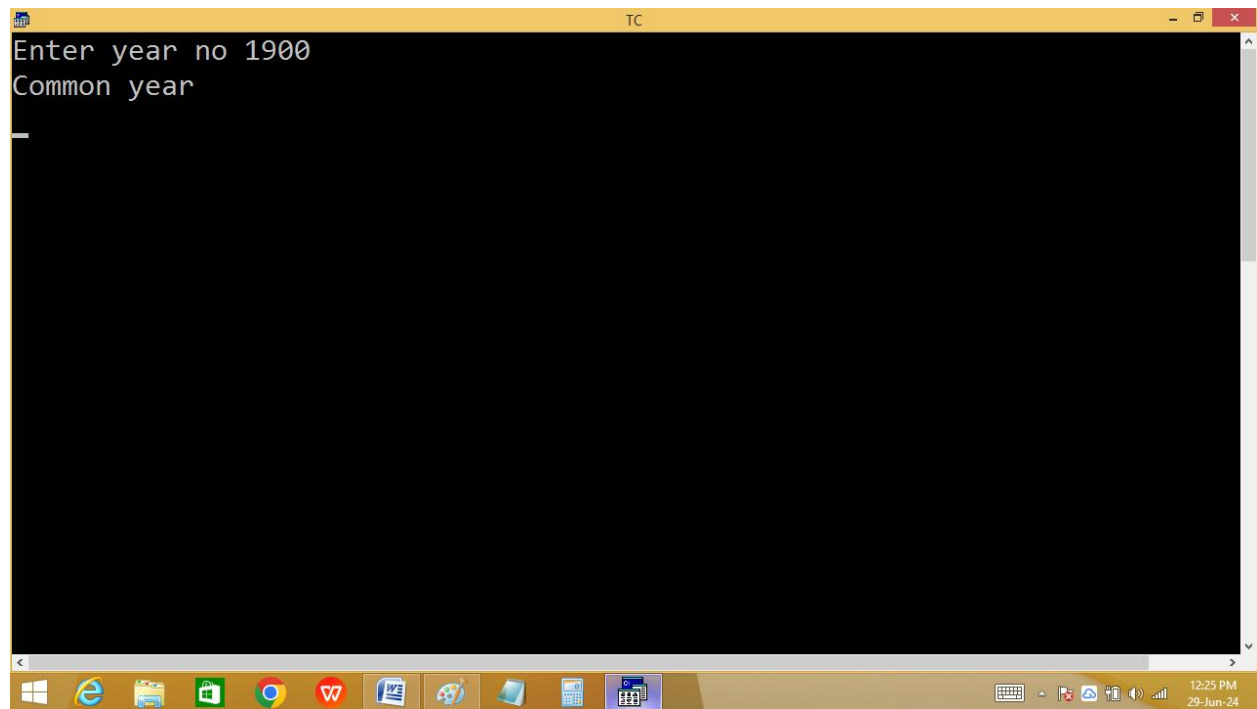
Finding leap / common year:

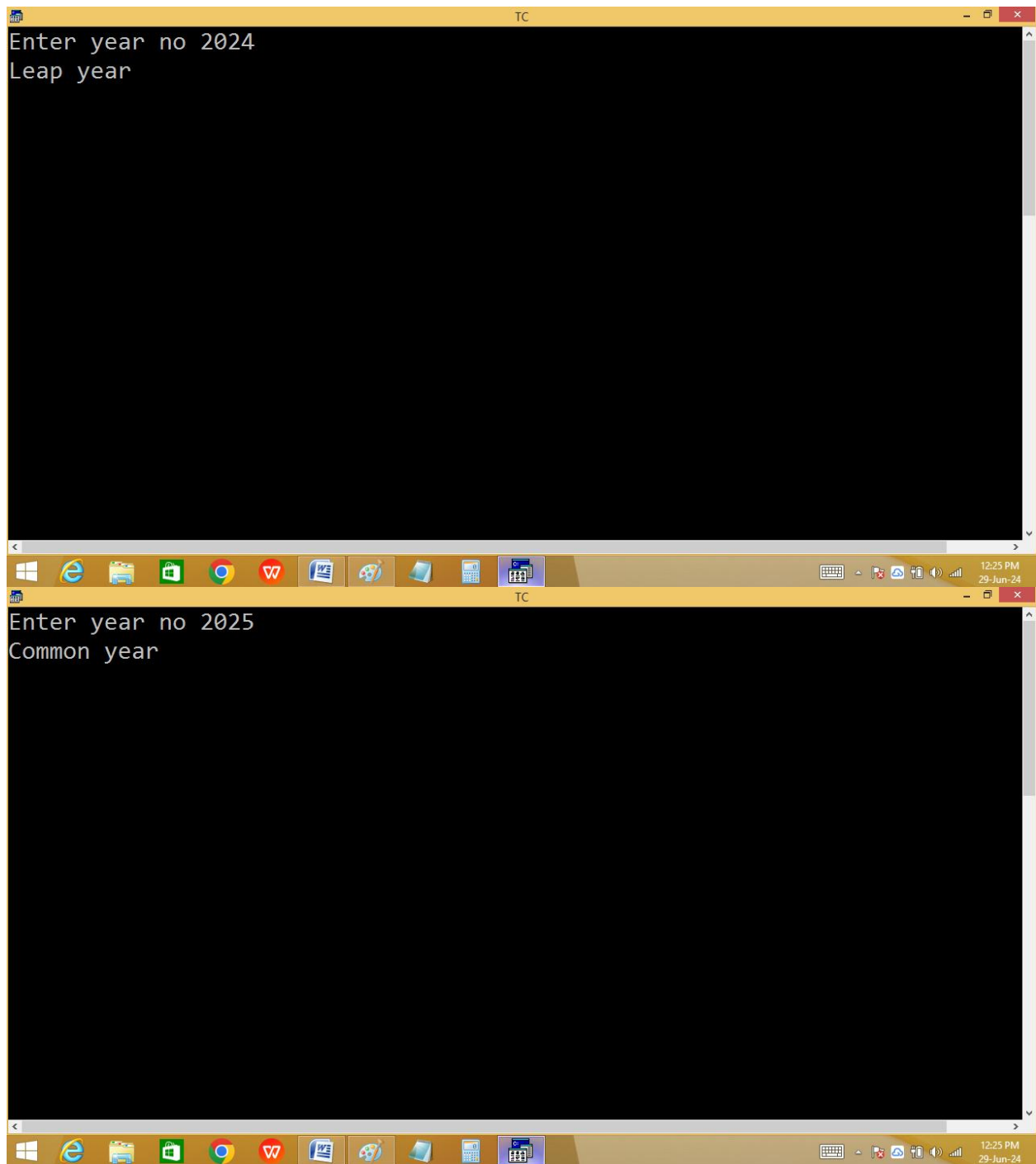
The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays the source code for a C program that checks if a year is a leap year. The code is as follows:

```
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 18 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter year no "); scanf("%d",&n);
if(n%4==0 && n%100!=0 || n%400==0)puts("Leap year");
else puts("Common_year");
getch();
}
```

The bottom screenshot shows the execution of the program. The user has entered '2000' when prompted 'Enter year no', and the program has output 'Leap year'.

```
Enter year no 2000
Leap year
```





Finding voter eligibility:

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window is the editor, displaying a C program. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the bottom of the editor shows 'Line 8', 'Col 50', and 'Insert Indent Tab Fill Unindent * E:11AM.C'. The code in the editor is as follows:

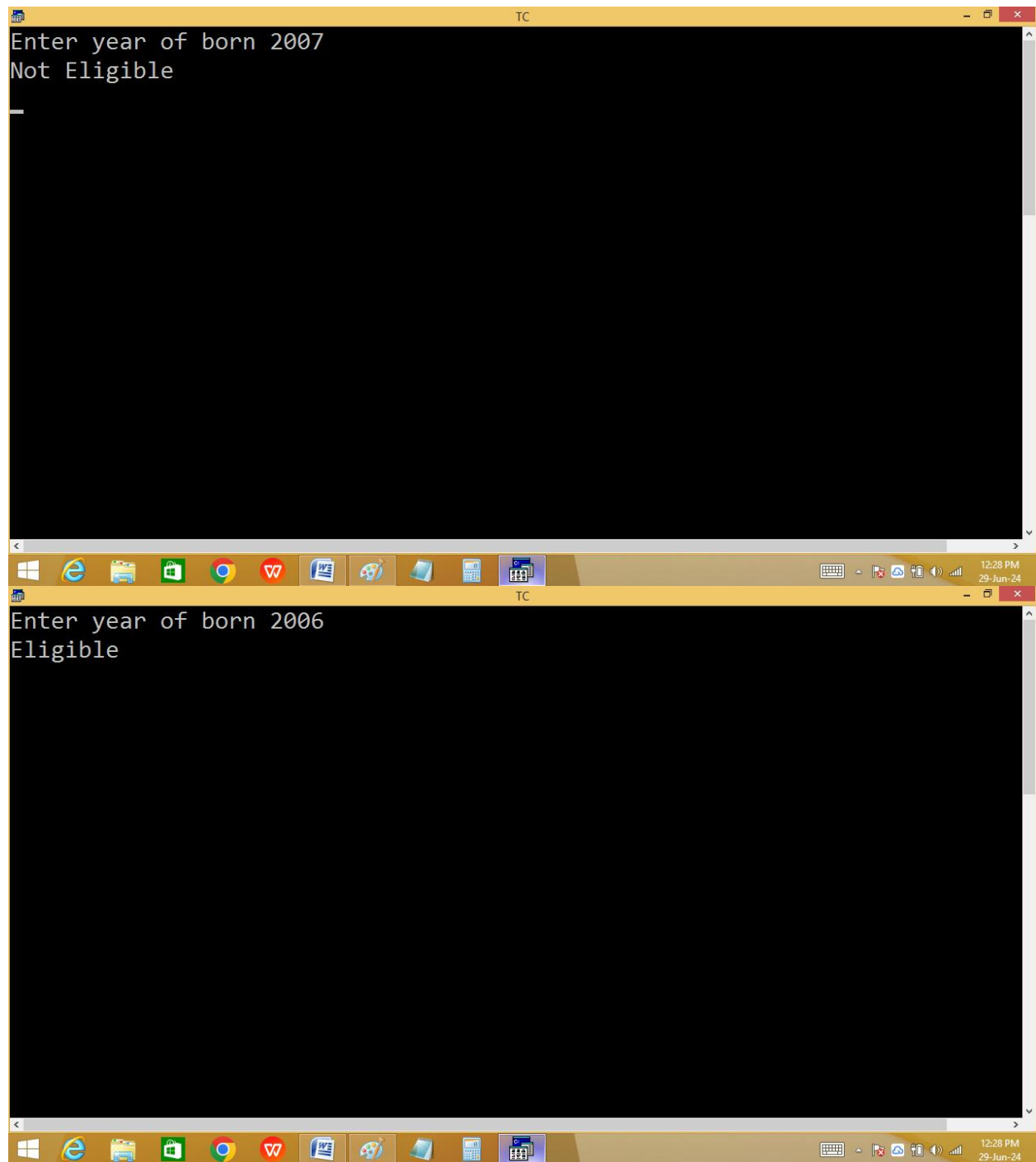
```
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter age "); scanf("%d",&n);
if(n>=18)puts("Eligible");else puts("Not Eligible_");
getch();
}
```

The bottom window shows the execution of the program. It displays the prompt 'Enter age 18' and the output 'Eligible'. The Windows taskbar at the bottom of the screen shows the time as 12:26 PM on 29-Jun-24.

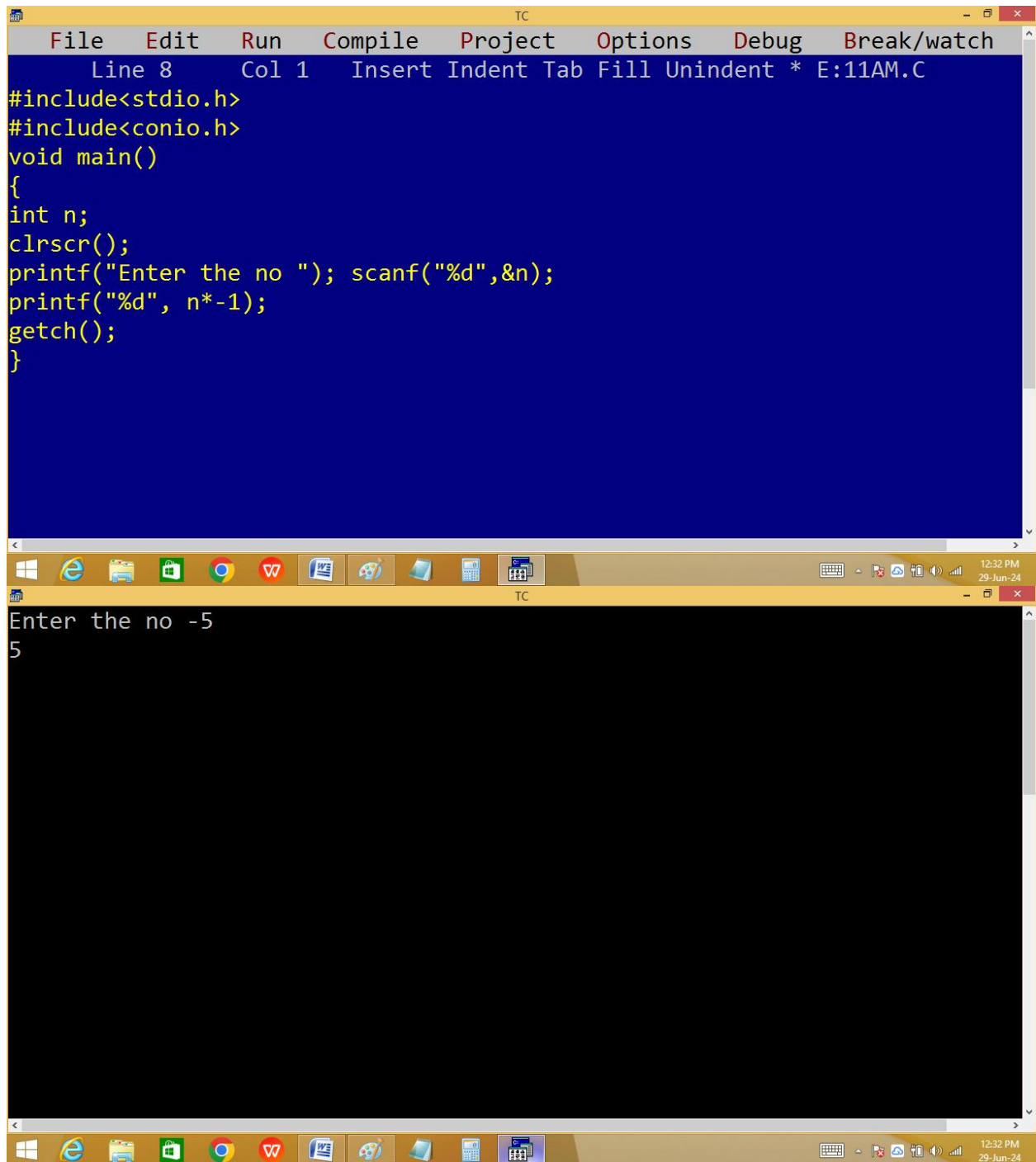
The image shows a screenshot of the Turbo C++ (TC) IDE. The top window displays the output of a program, which has prompted the user to "Enter age 17" and then printed "Not Eligible". The bottom window shows the source code of the program, which is a C program that checks if a person is eligible based on their birth year. The code includes `<stdio.h>` and `<conio.h>`, and uses `scanf` to read the age and `puts` to print the result. The status bar at the bottom indicates the current line and column, and the file name is `E:11AM.C`.

```
Enter age 17
Not Eligible
```

```
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 16 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter year of born "); scanf("%d",&n);
if(2024-n>=18) puts("Eligible");else puts("Not Eligible");
getch();
}
```



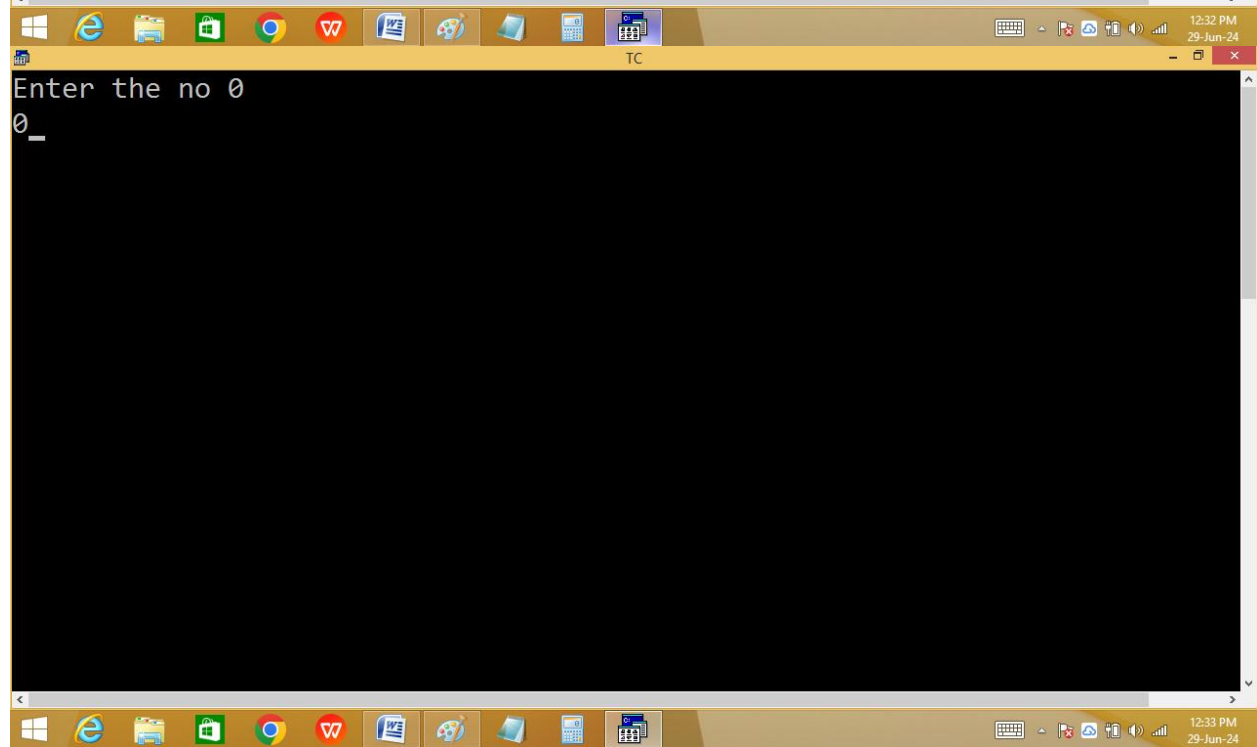
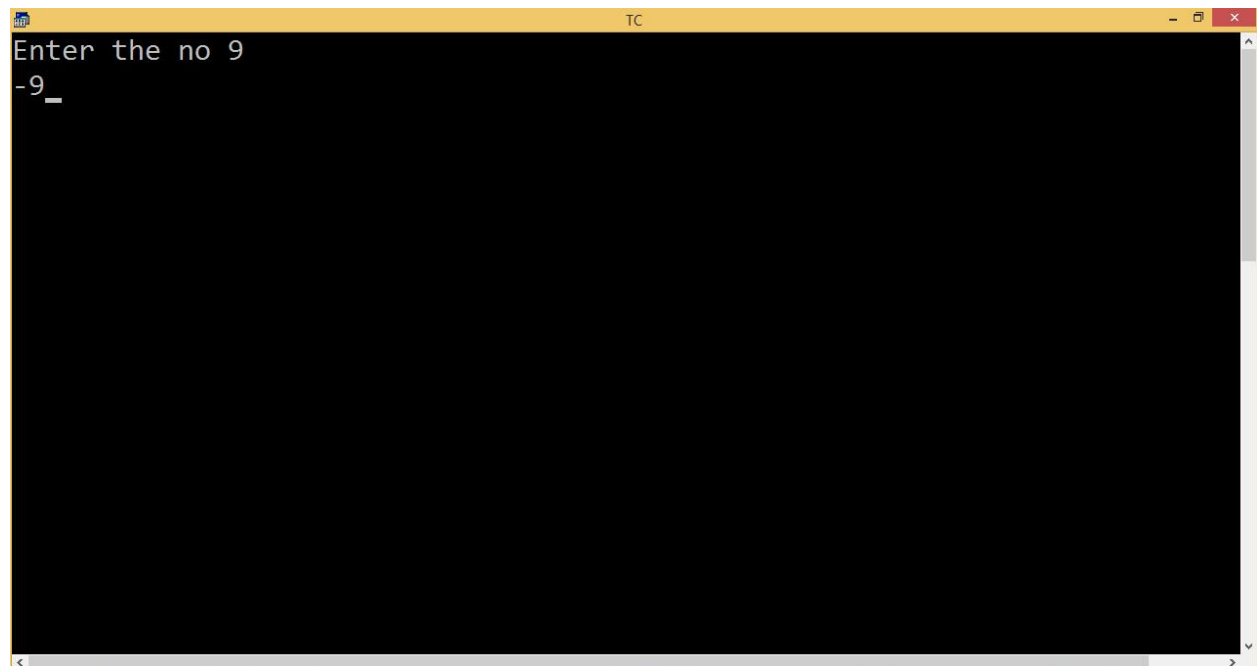
Read a no and convert the -ve to +ve and +ve.



The image shows a screenshot of the Turbo C++ (TC) IDE. The top window displays the source code for a C program. The code includes `<stdio.h>` and `<conio.h>`, defines a `main` function, declares an integer `n`, clears the screen with `clrscr()`, prompts the user to enter a number using `printf`, reads the input with `scanf`, and then prints the absolute value of the input using `printf("%d", n*-1);`. The bottom window shows the program's execution. It displays the prompt "Enter the no -5" and the user's input "5", demonstrating that the program correctly converts the negative input to its positive counterpart.

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 1 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);
printf("%d", n*-1);
getch();
}
```

Enter the no -5
5



Home work: Finding the salesman gross salary using below table.

Sales \geq100000	Sales <100000
Basic=10000	Basic=10000
Da=72.5% of basic	Da=72.5% of basic
Bonus=10000	Bonus=3000
Commission=10% of sales	Commission=5% of sales
Gross = basic + da + bonus + commission	

