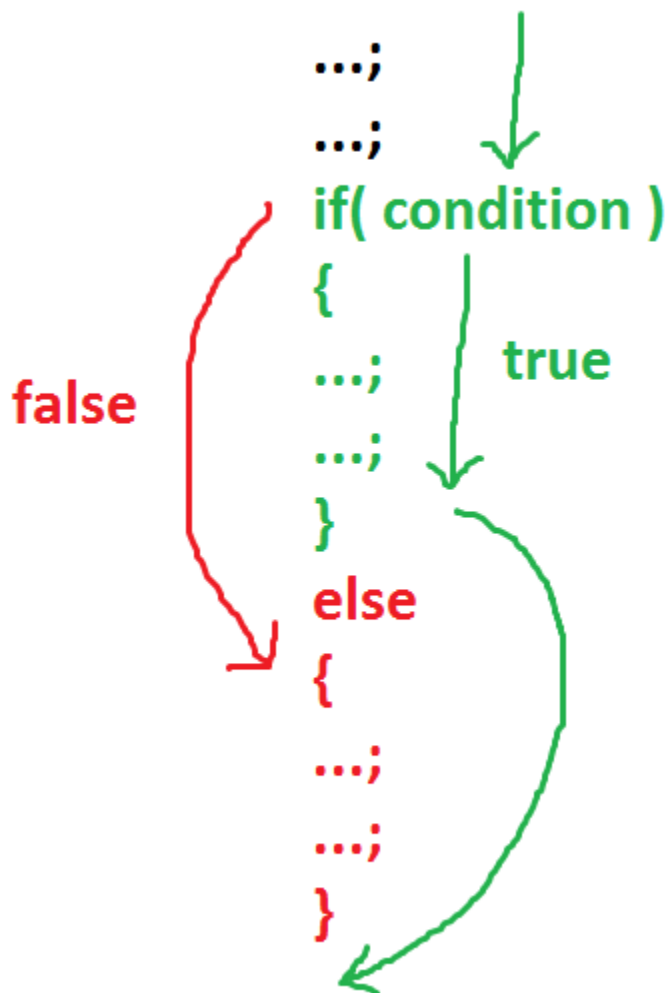
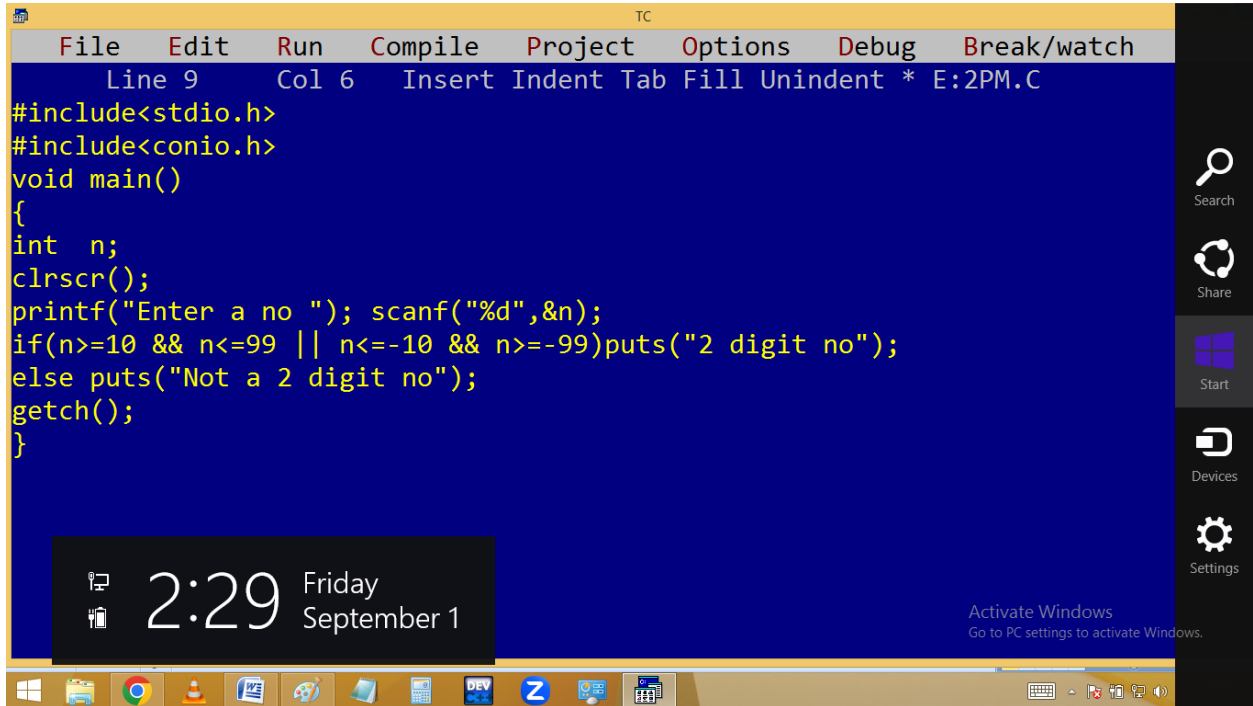


If..else: When the program is having 2 options / conditions and user have to select any one then go for if..else.

If condition true statements in if block { } are executed. If condition false statements in else block { } are executed.

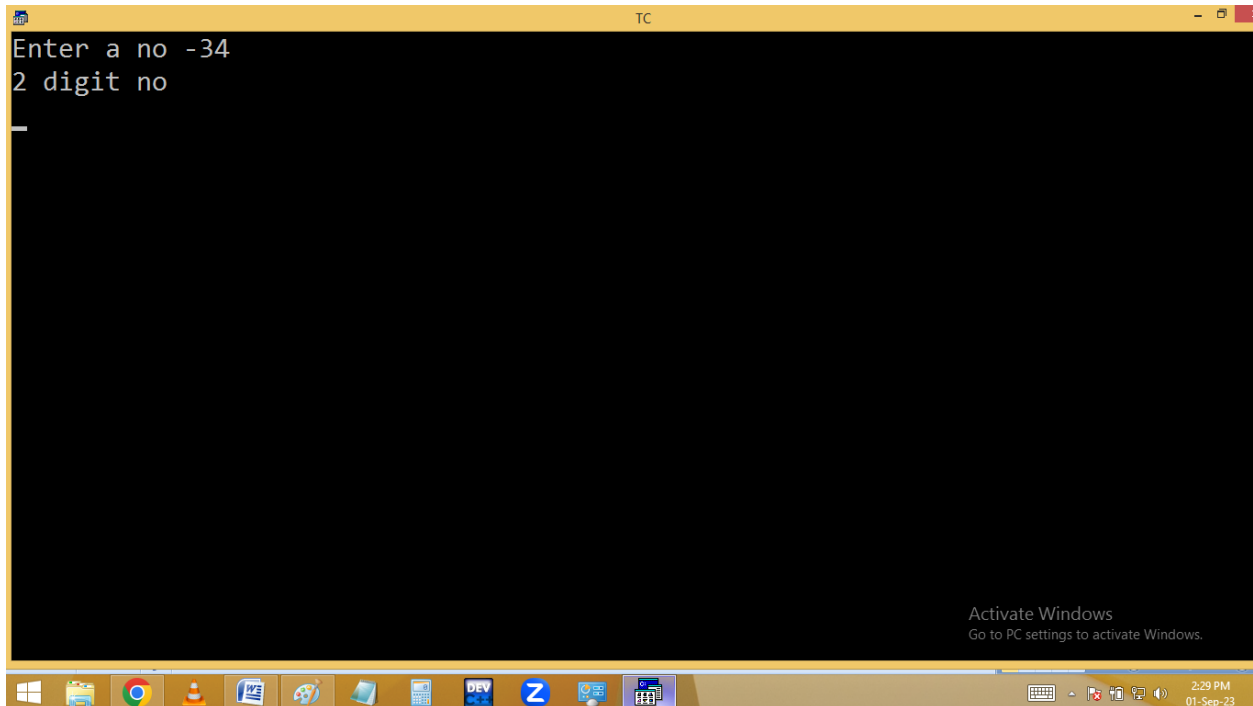


Write a program to find the given no is a 2 digit no or not.



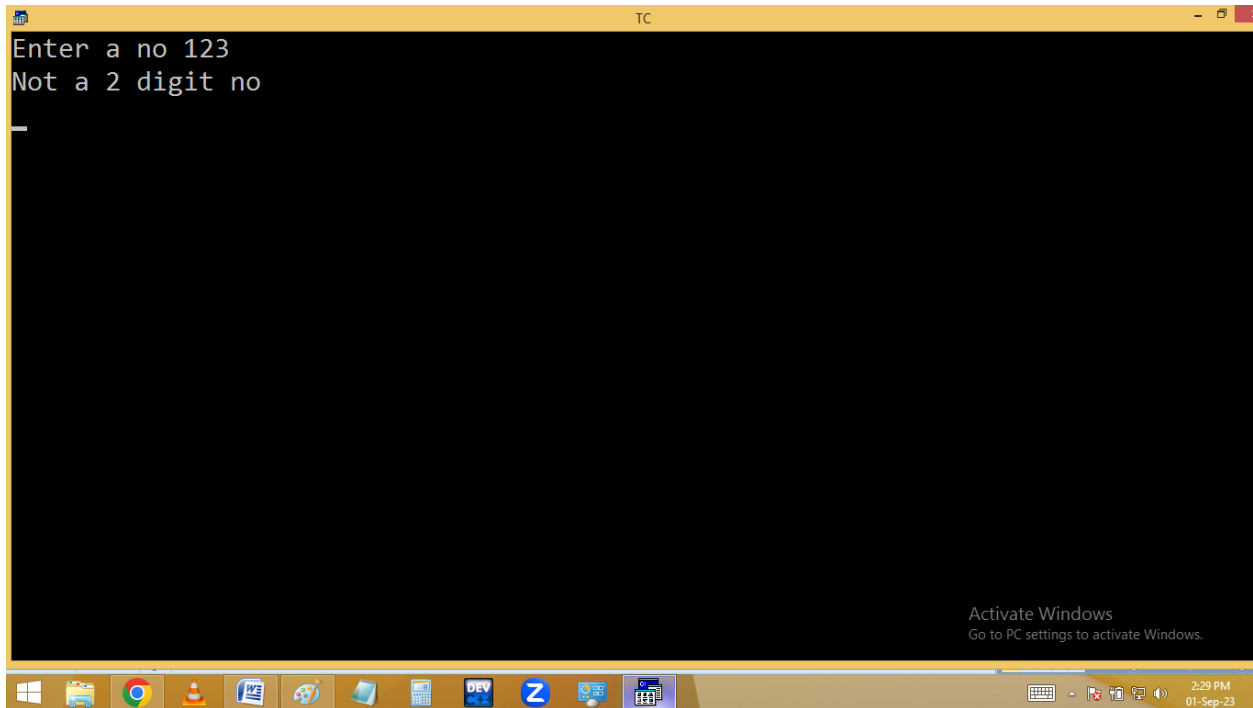
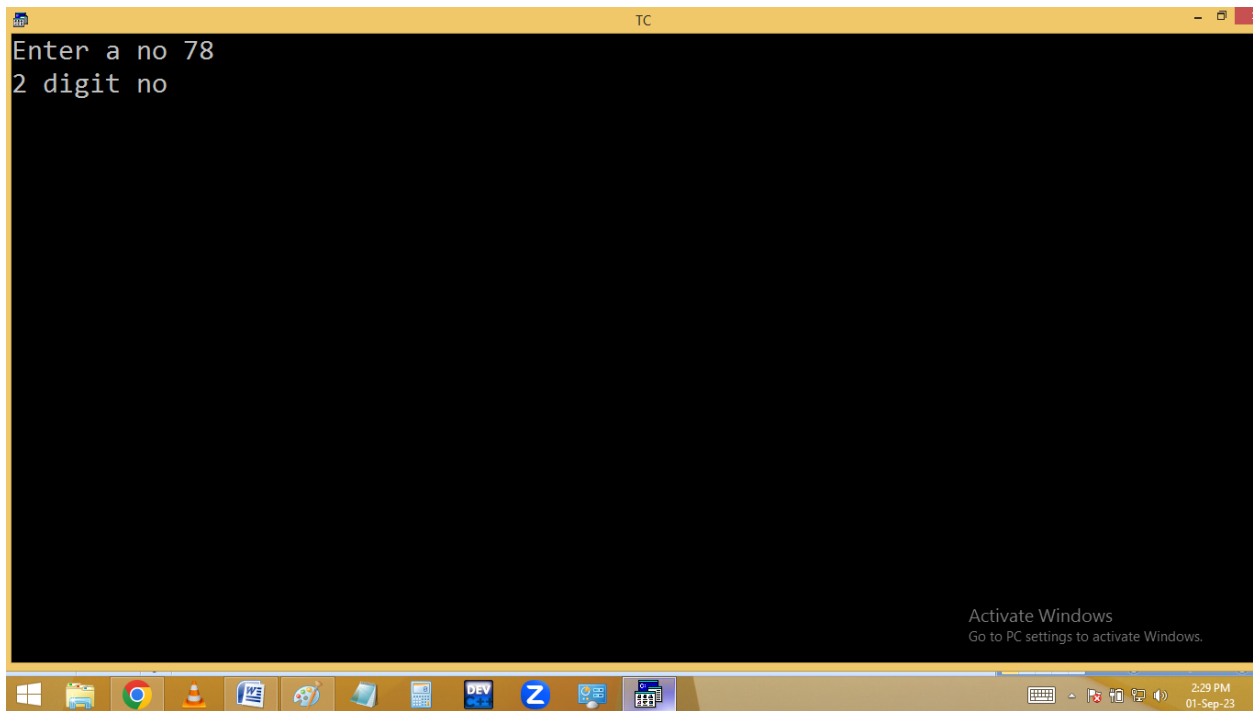
The screenshot shows the Turbo C++ (TC) IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a toolbar. The code is written in a blue editor window. The code includes `<stdio.h>` and `<conio.h>`, defines a `main` function, declares an integer `n`, clears the screen with `clrscr()`, prompts the user to enter a number, and uses a conditional statement to check if the number is a 2-digit number. The Windows taskbar at the bottom shows the time as 2:29 on Friday, September 1.

```
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 6 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter a no "); scanf("%d",&n);
if(n>=10 && n<=99 || n<=-10 && n>=-99)puts("2 digit no");
else puts("Not a 2 digit no");
getch();
}
```

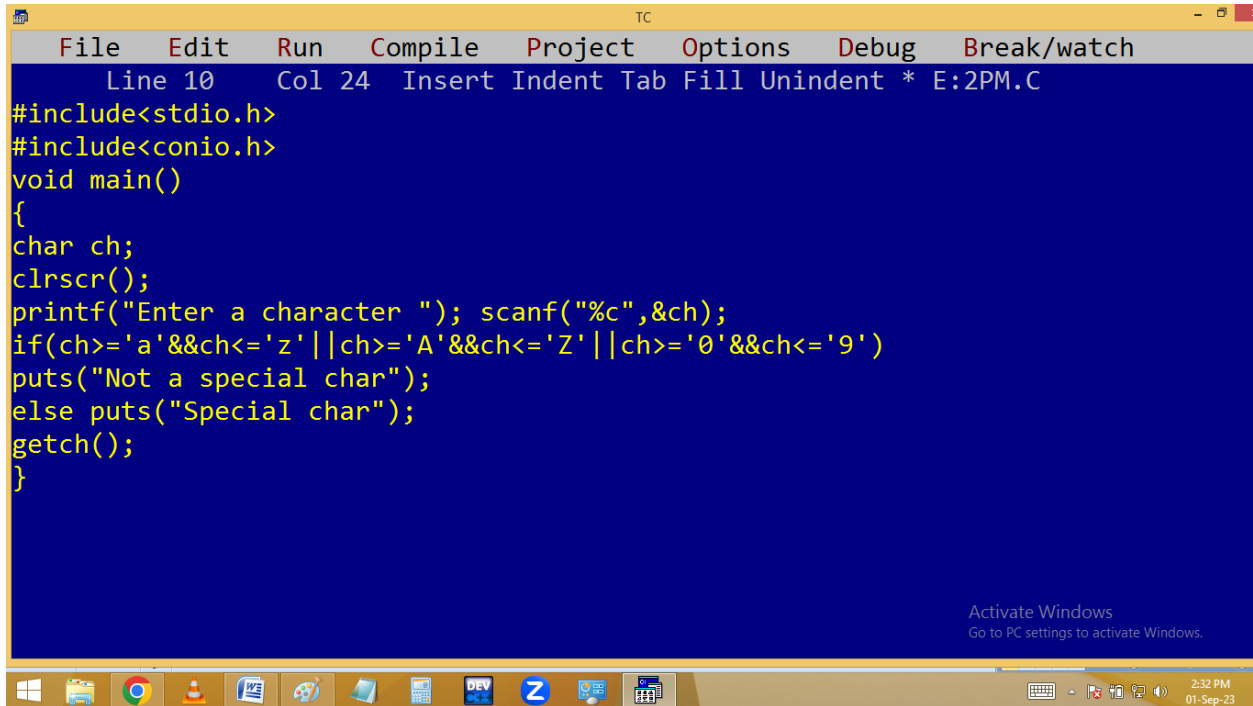


The screenshot shows the Turbo C++ (TC) IDE with the same menu bar and toolbar. The output window shows the program's execution: it prompts "Enter a no -34" and then outputs "2 digit no". The Windows taskbar at the bottom shows the time as 2:29 PM on 01-Sep-23.

```
Enter a no -34
2 digit no
```



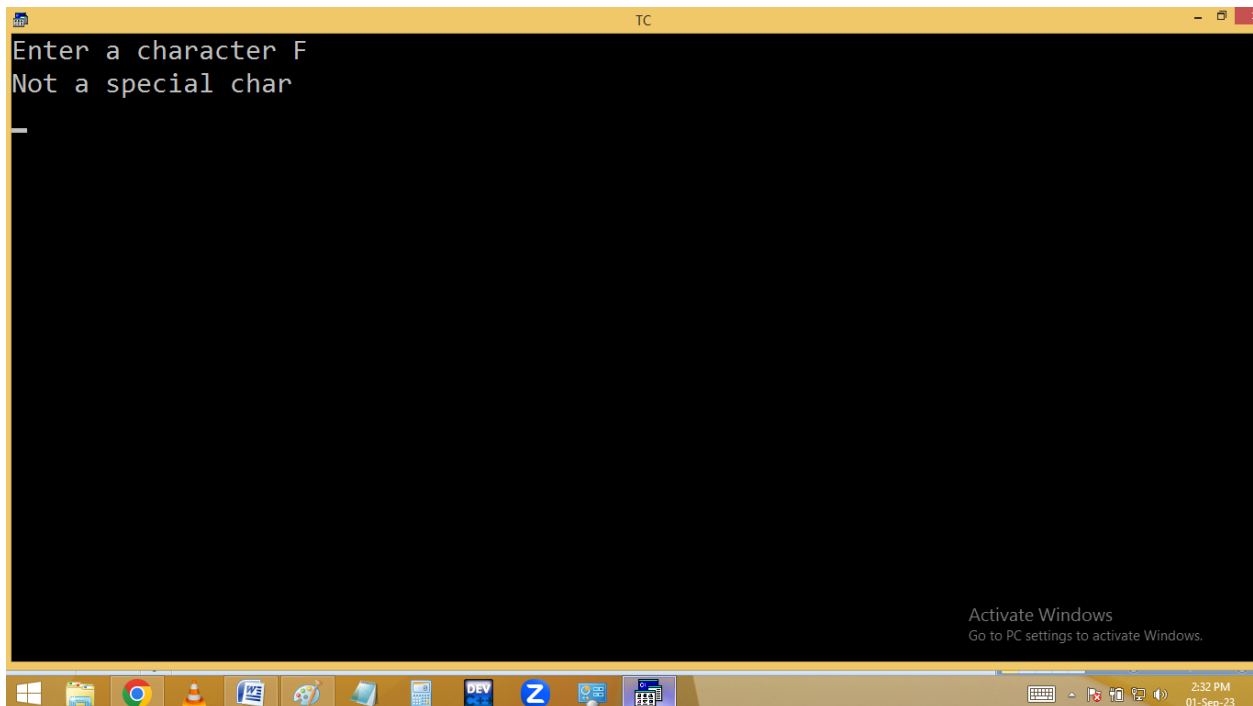
Write a c program to find special char or not.



The screenshot shows the Turbo C++ (TC) IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 10, Col 24, Insert, Indent, Tab, Fill, Unindent, * E:2PM.C). The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a character "); scanf("%c",&ch);
if(ch>='a'&&ch<='z' || ch>='A'&&ch<='Z' || ch>='0'&&ch<='9')
puts("Not a special char");
else puts("Special char");
getch();
}
```

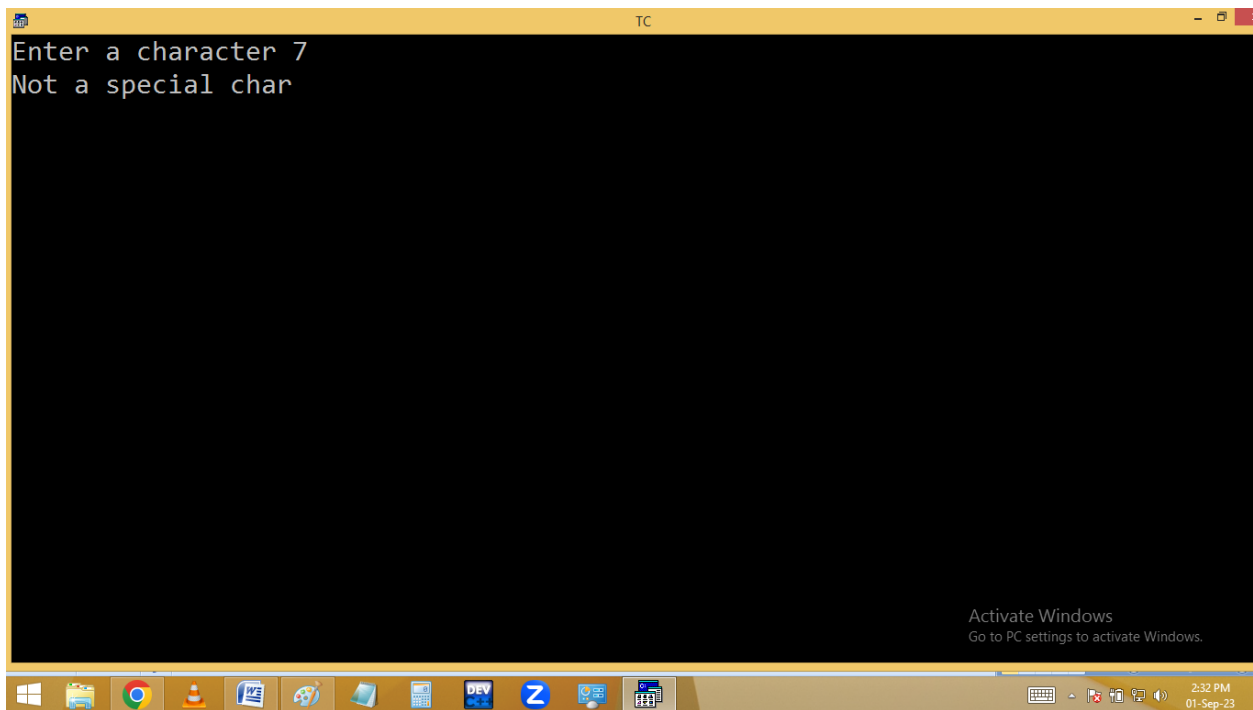
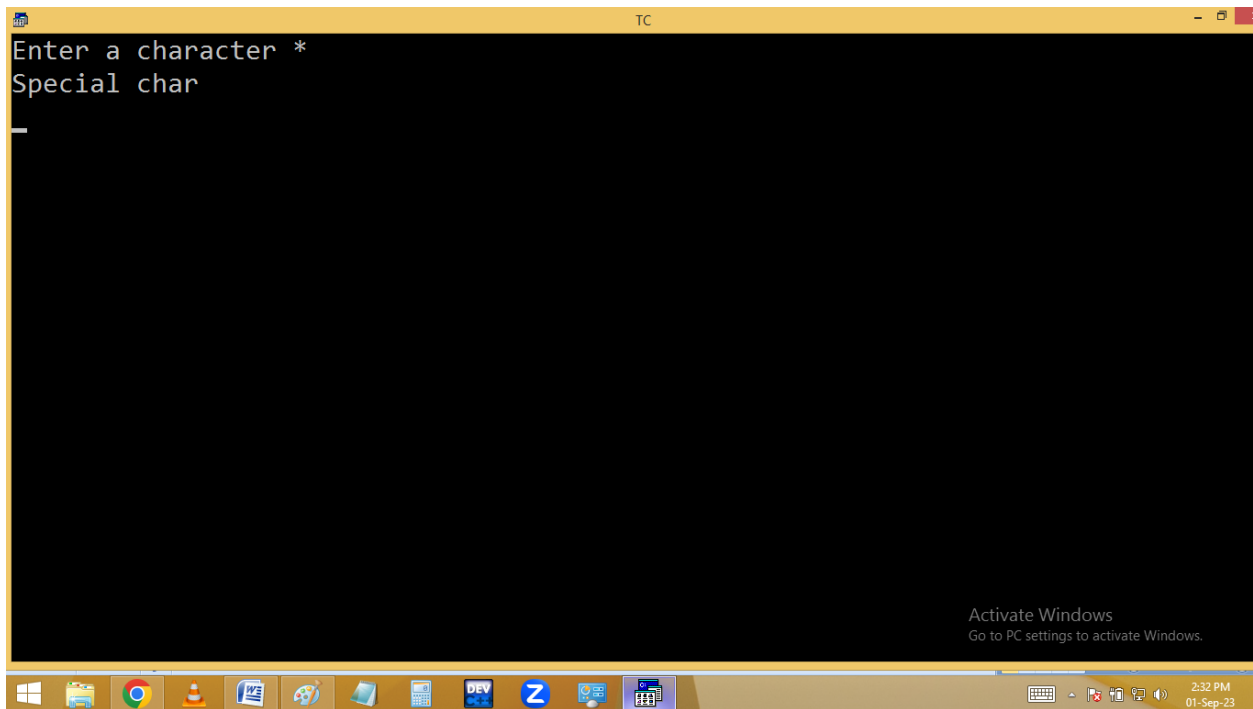
The Windows taskbar at the bottom shows the time as 2:32 PM on 01-Sep-23.

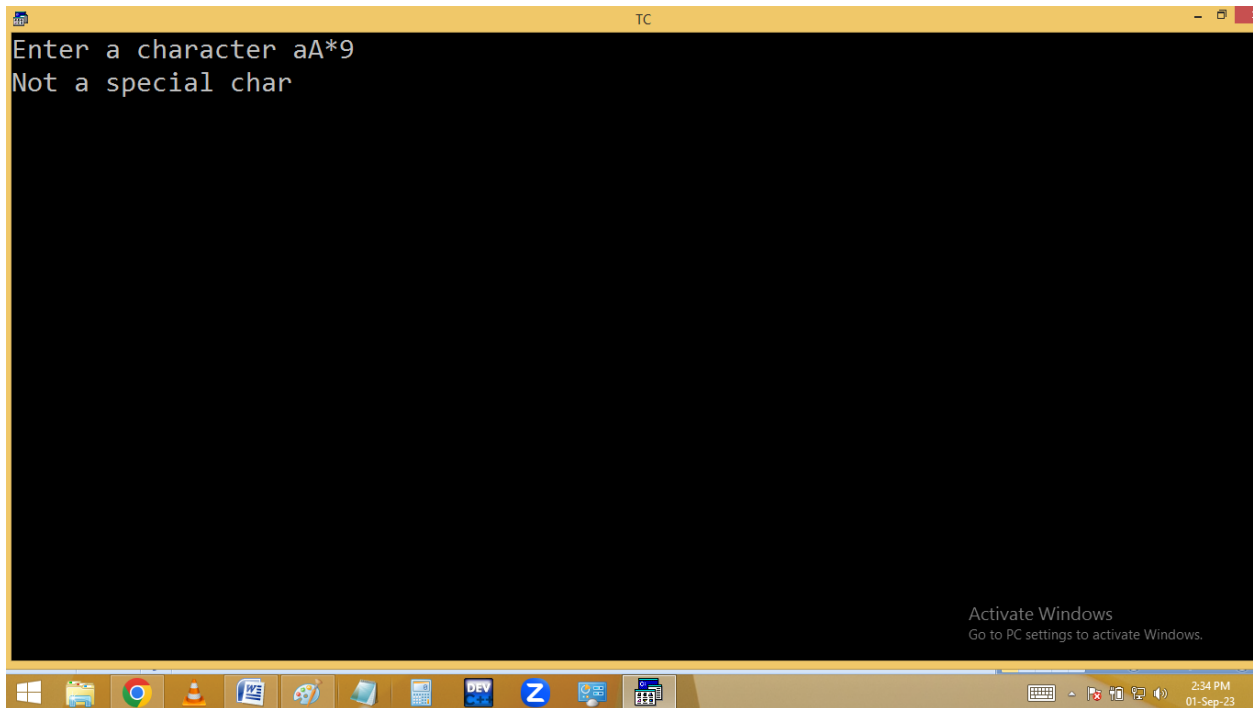


The screenshot shows the Turbo C++ (TC) IDE with the same menu bar and status bar. The output window displays the program's execution:

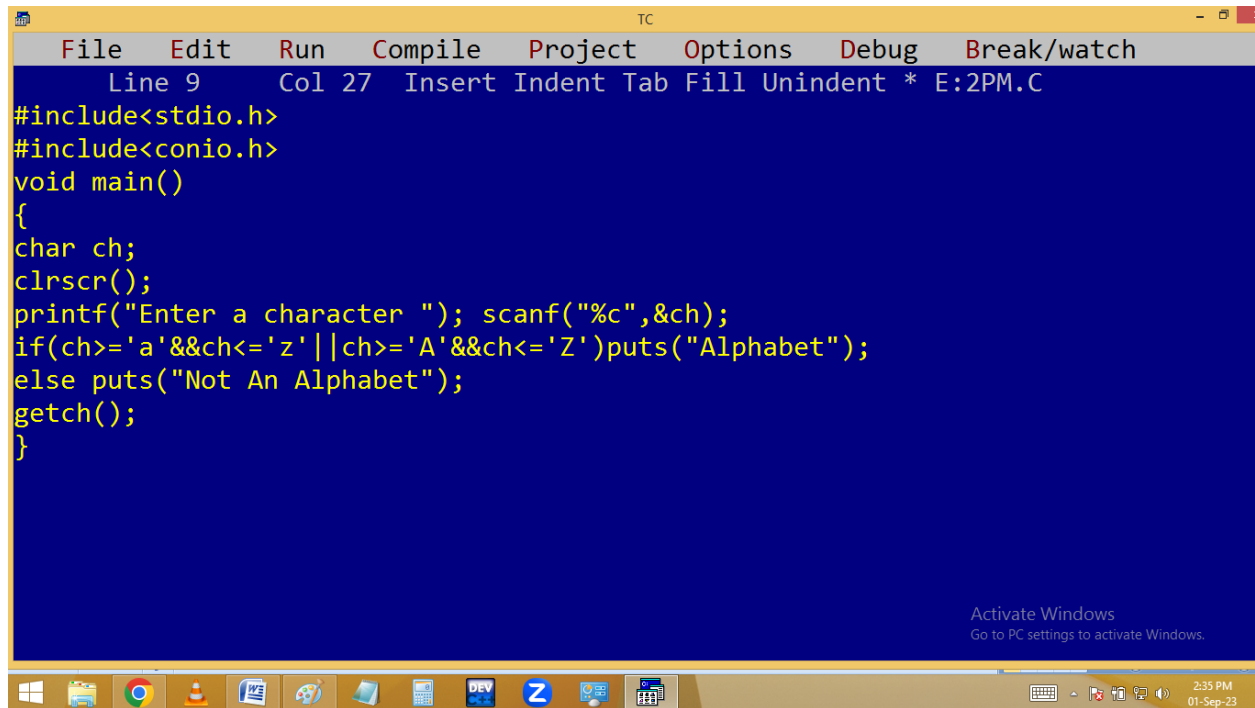
```
Enter a character F
Not a special char
```

The Windows taskbar at the bottom shows the time as 2:32 PM on 01-Sep-23.





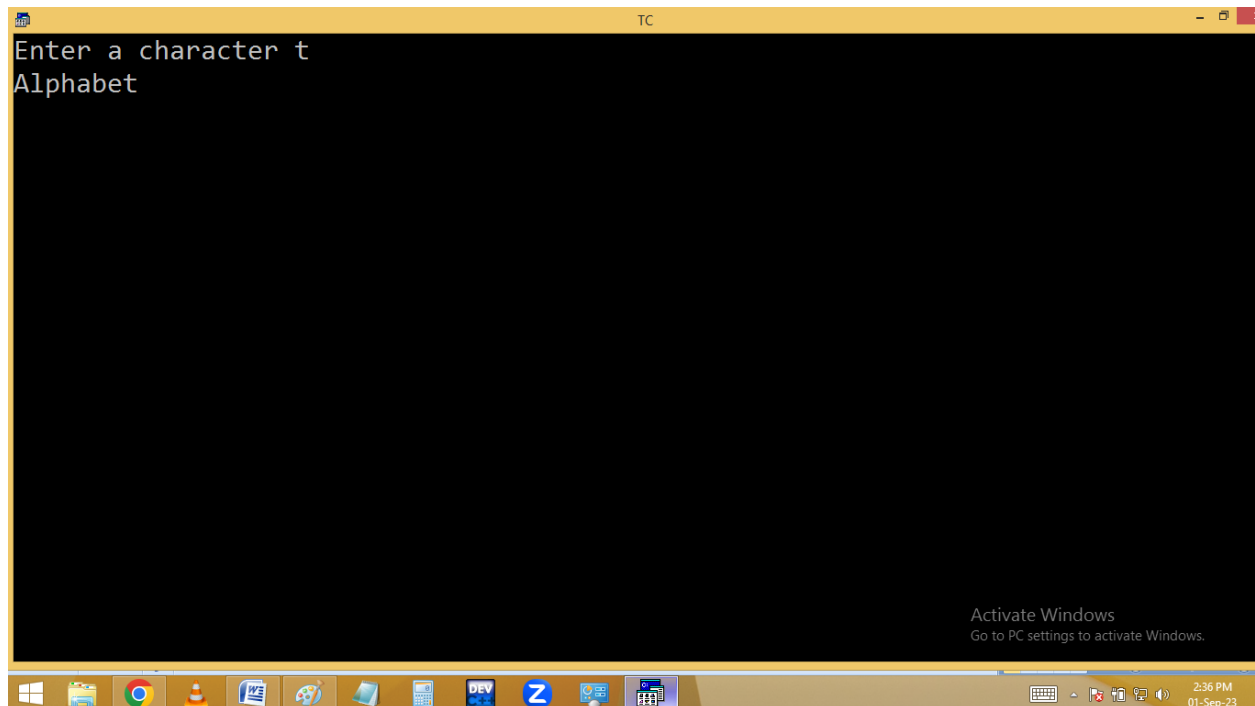
Finding alphabet or not:



The screenshot shows the Turbo C++ IDE with the following code in the editor:

```
Line 9 Col 27 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a character "); scanf("%c",&ch);
if(ch>='a'&&ch<='z' || ch>='A'&&ch<='Z')puts("Alphabet");
else puts("Not An Alphabet");
getch();
}
```

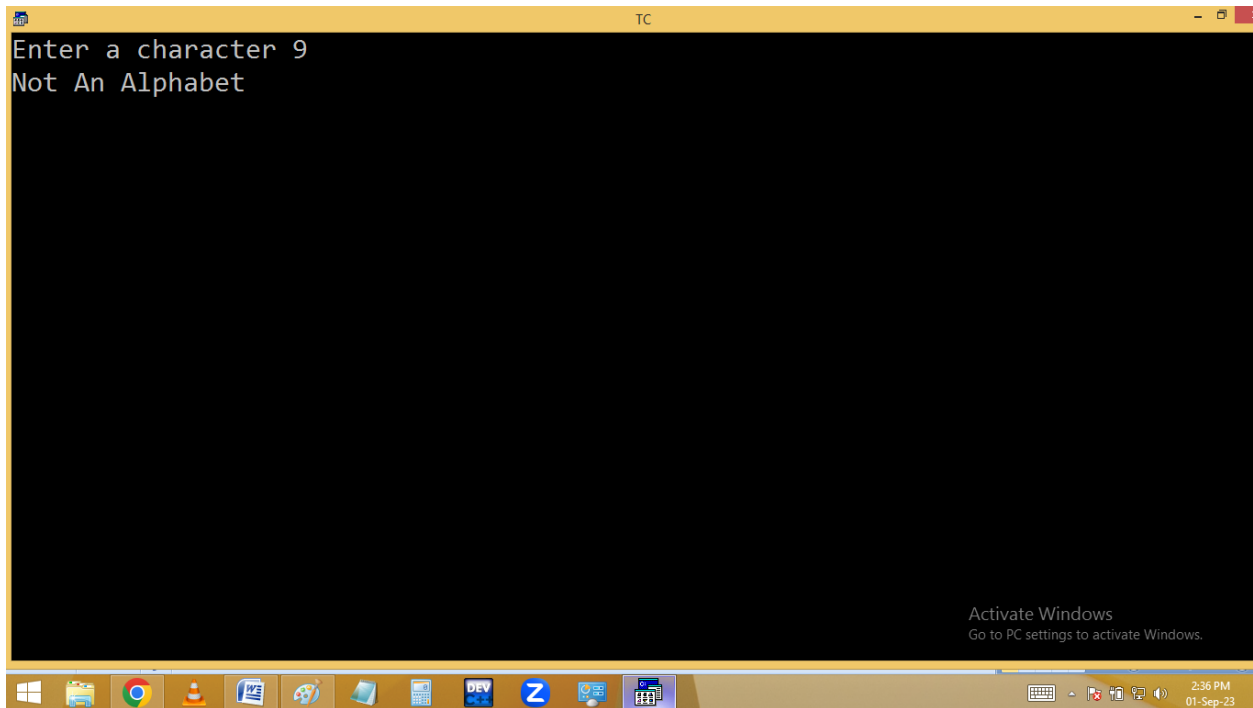
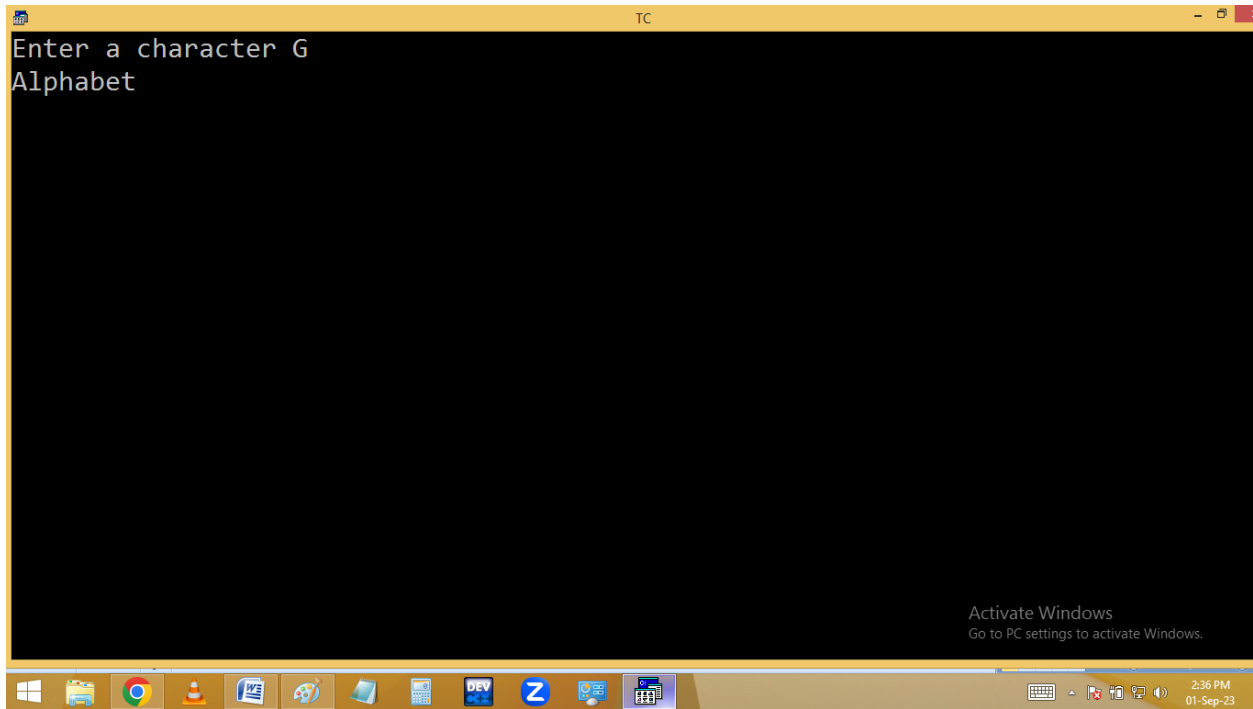
The taskbar at the bottom shows various application icons, including Windows Explorer, Google Chrome, and the Turbo C++ IDE. The system clock indicates 2:35 PM on 01-Sep-23.

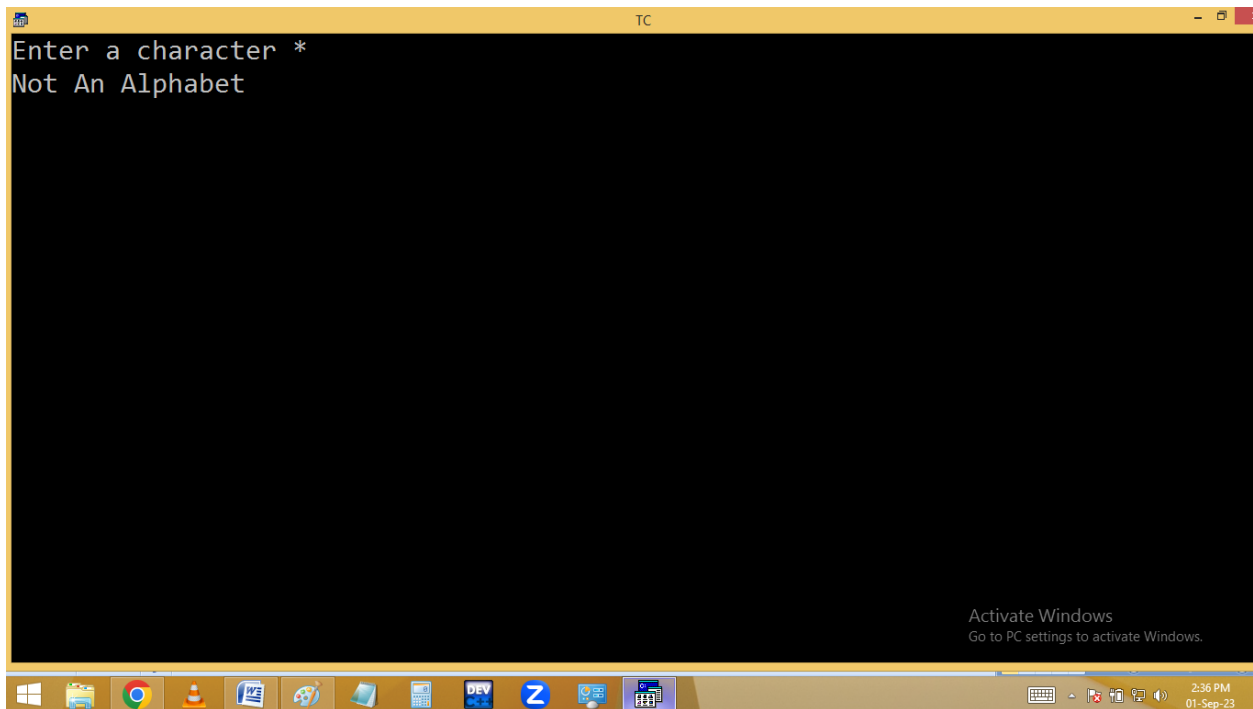


The screenshot shows the Turbo C++ IDE with the following output in the console:

```
Enter a character t
Alphabet
```

The taskbar at the bottom shows various application icons, including Windows Explorer, Google Chrome, and the Turbo C++ IDE. The system clock indicates 2:36 PM on 01-Sep-23.





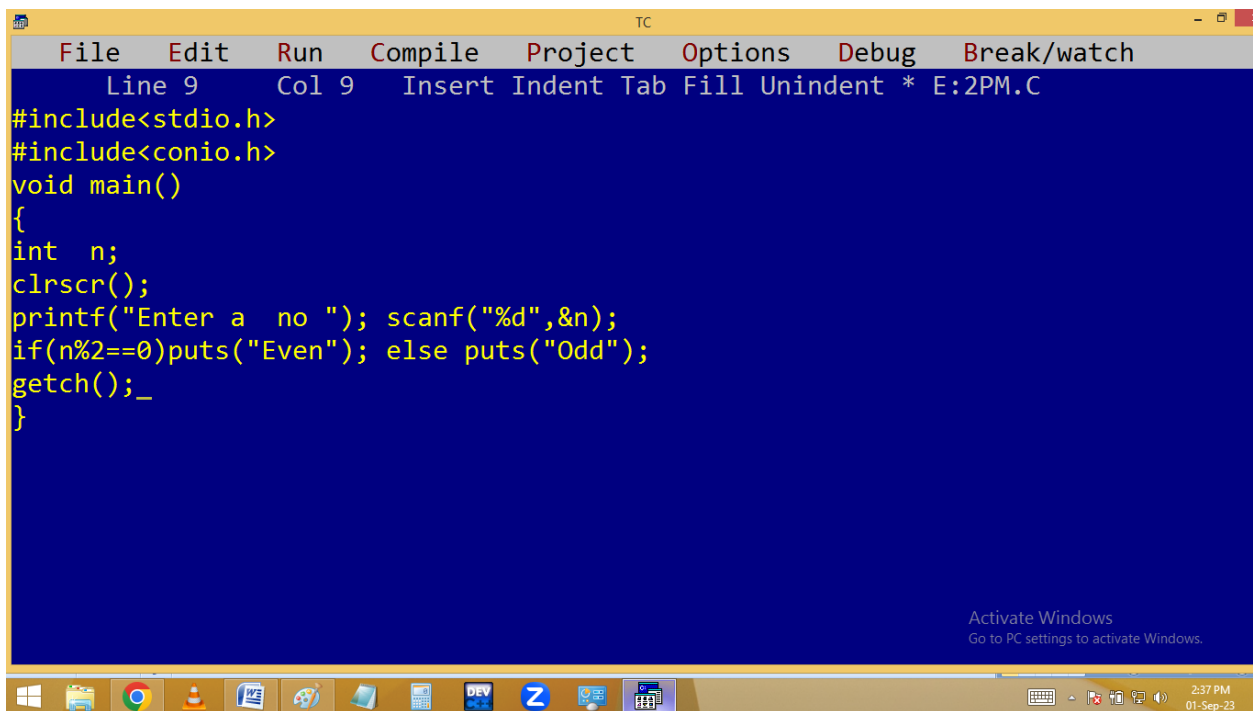
TC

```
Enter a character *  
Not An Alphabet
```

Activate Windows
Go to PC settings to activate Windows.

2:36 PM
01-Sep-23

Finding Even/Odd:



TC

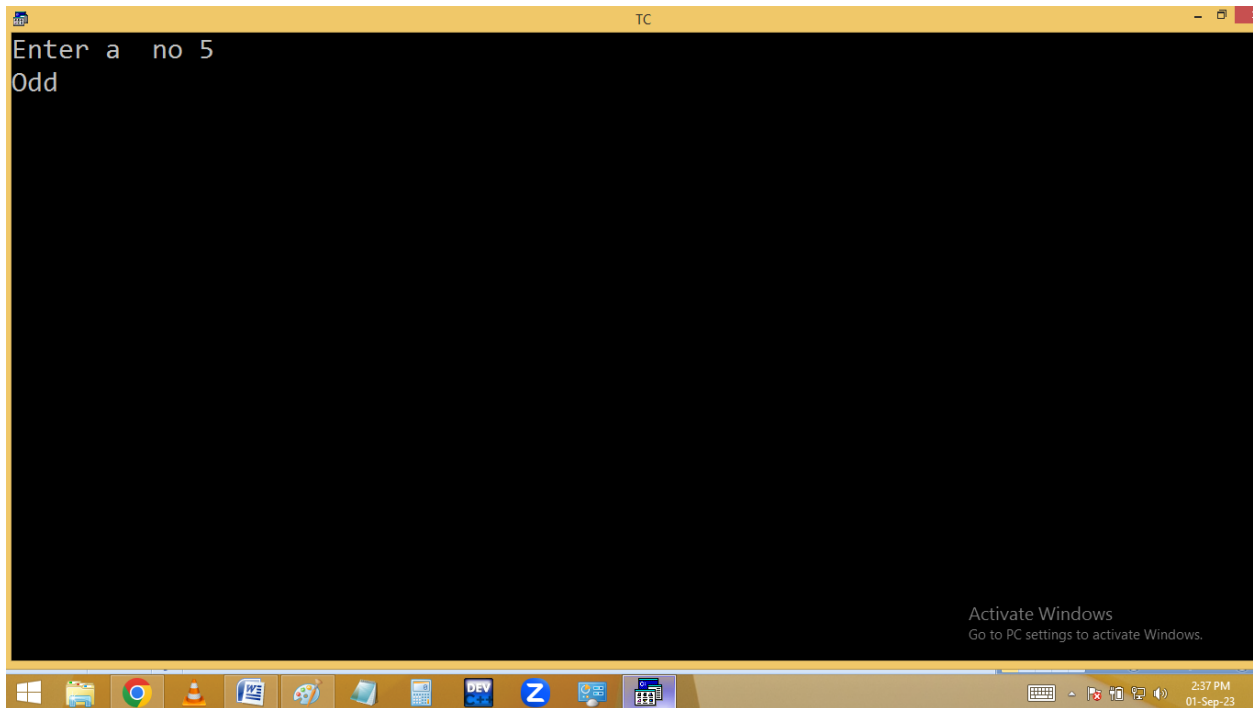
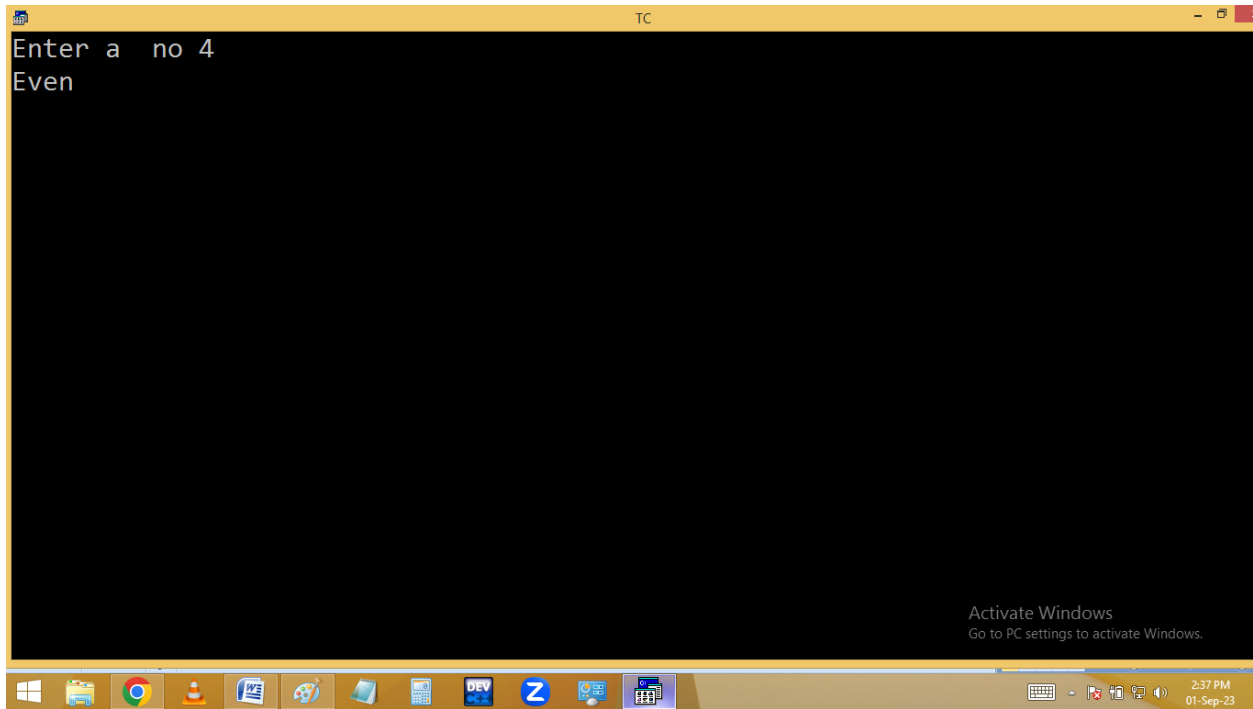
File Edit Run Compile Project Options Debug Break/watch

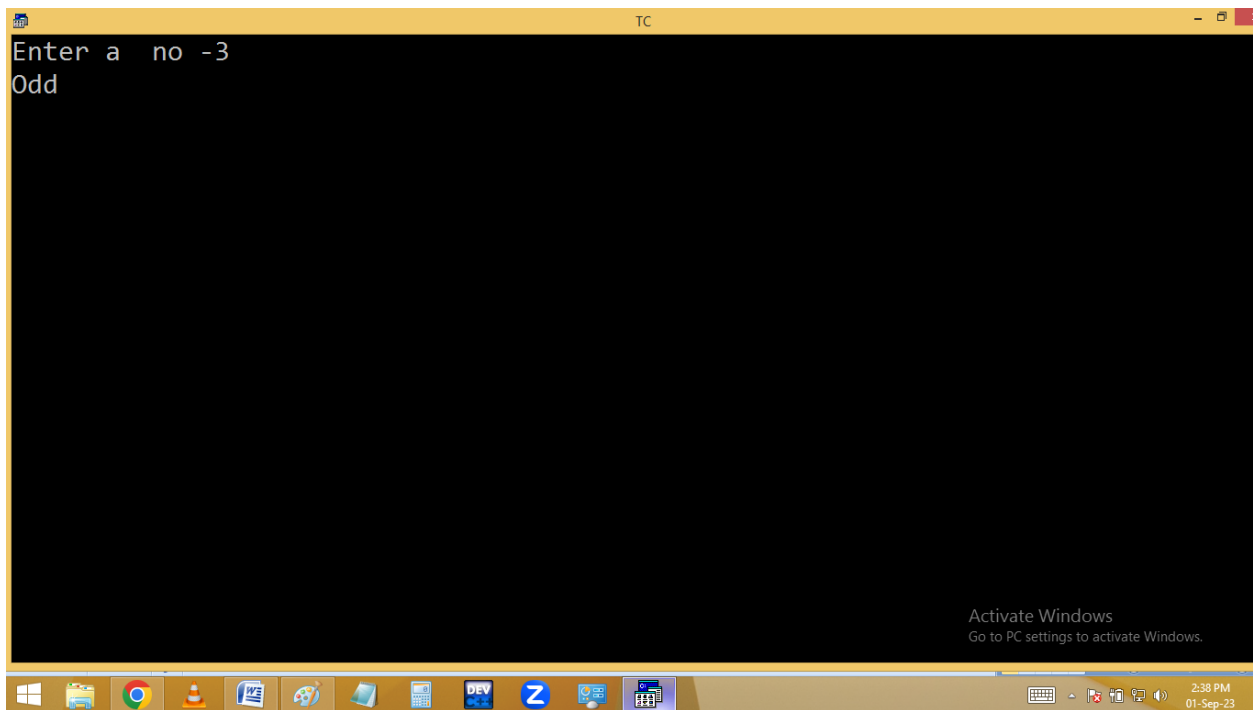
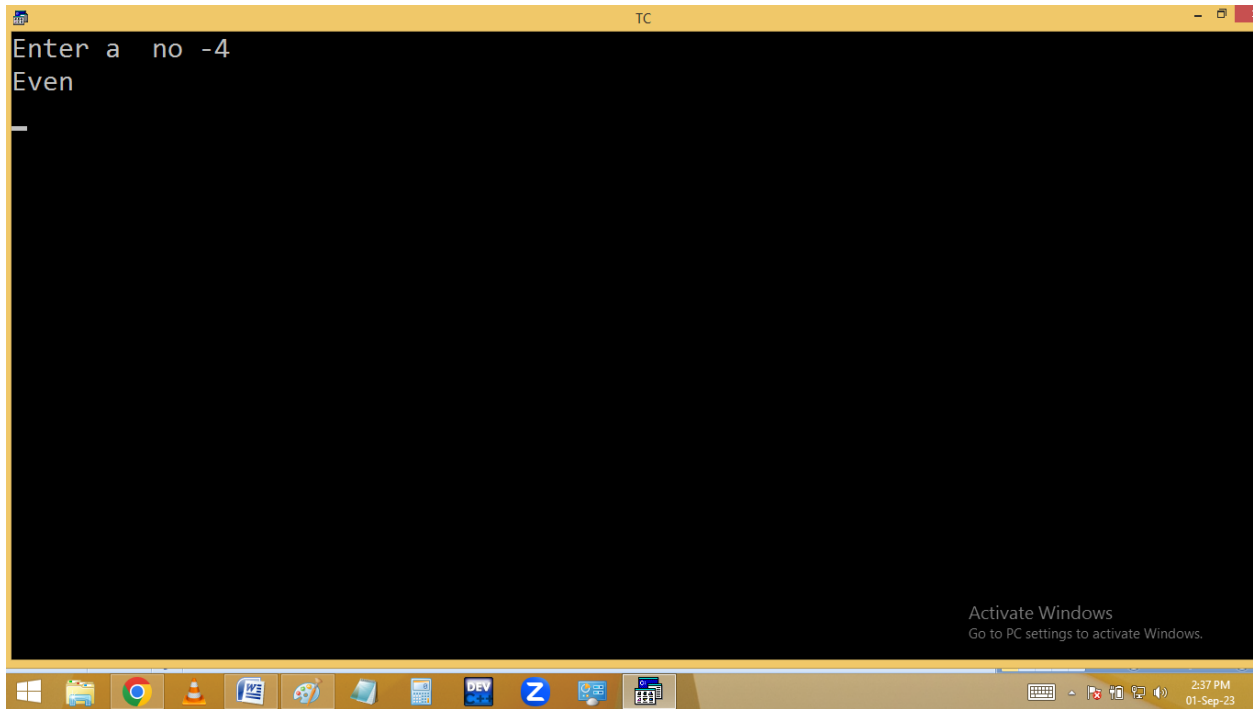
Line 9 Col 9 Insert Indent Tab Fill Unindent * E:2PM.C

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

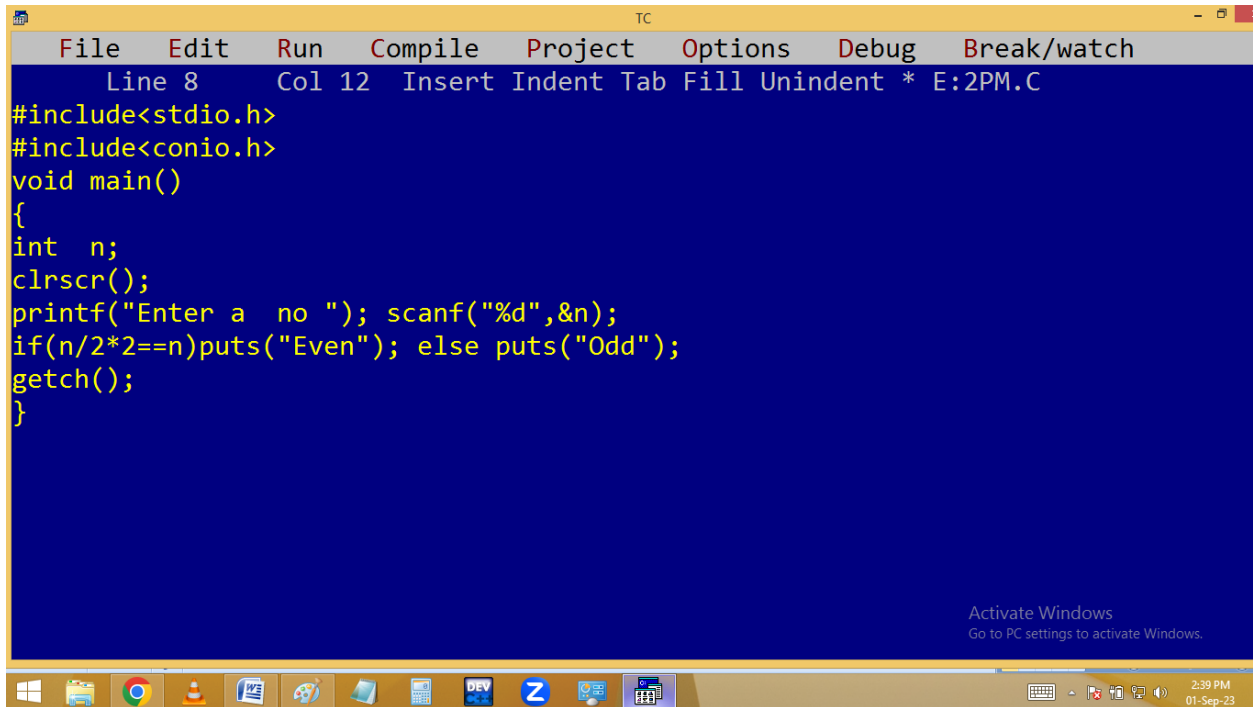
Activate Windows
Go to PC settings to activate Windows.

2:37 PM
01-Sep-23





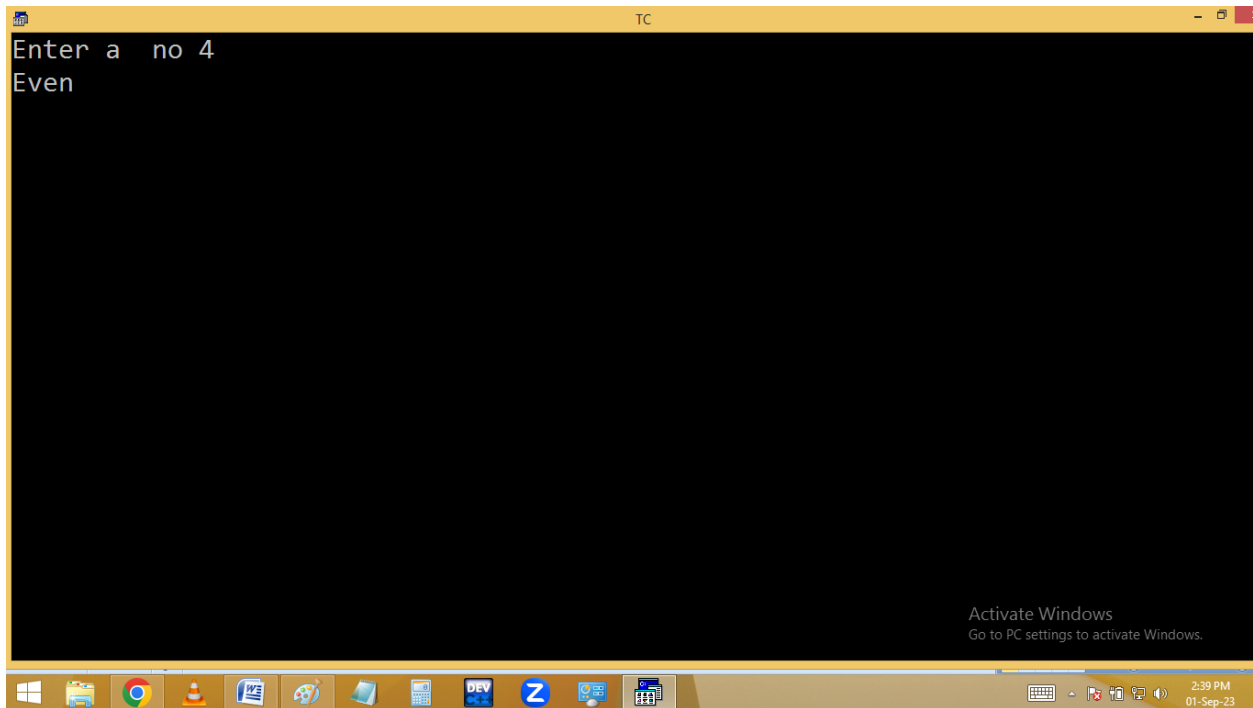
Without using %:



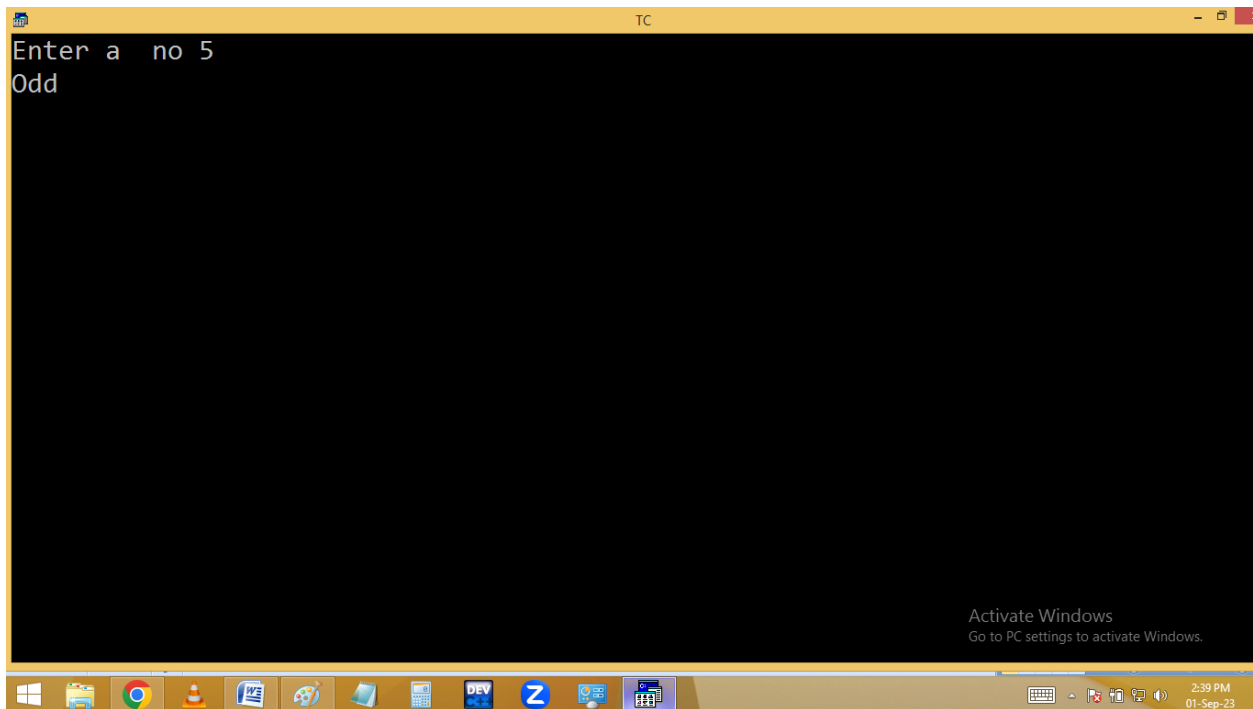
The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 8 Col 12 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

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

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window.

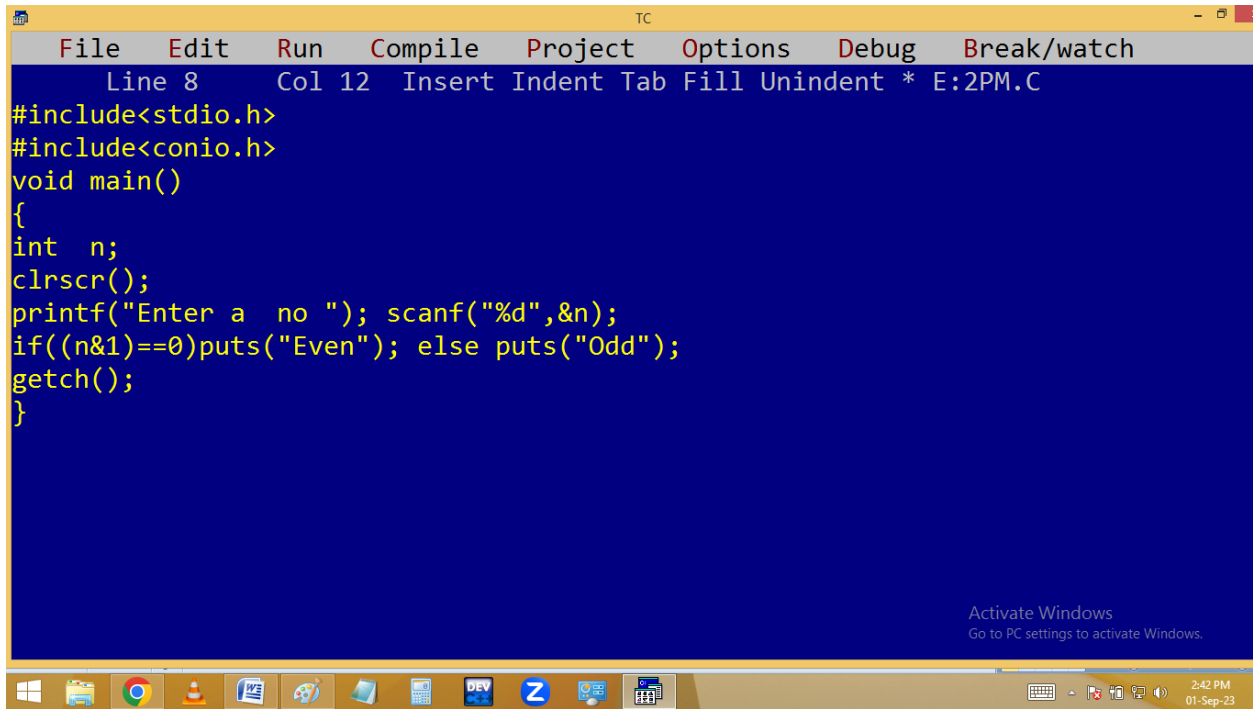


The screenshot shows the Turbo C++ (TC) IDE with a black background, displaying the output of the program. The text 'Enter a no 4' and 'Even' is visible on the first two lines. The 'Activate Windows' watermark is also present in the bottom right corner.



$4/2=2*2=4==4$ 
if($n/2*2==n$) p("Even"); else p("Odd");
 $5/2=2*2=4==5$ 

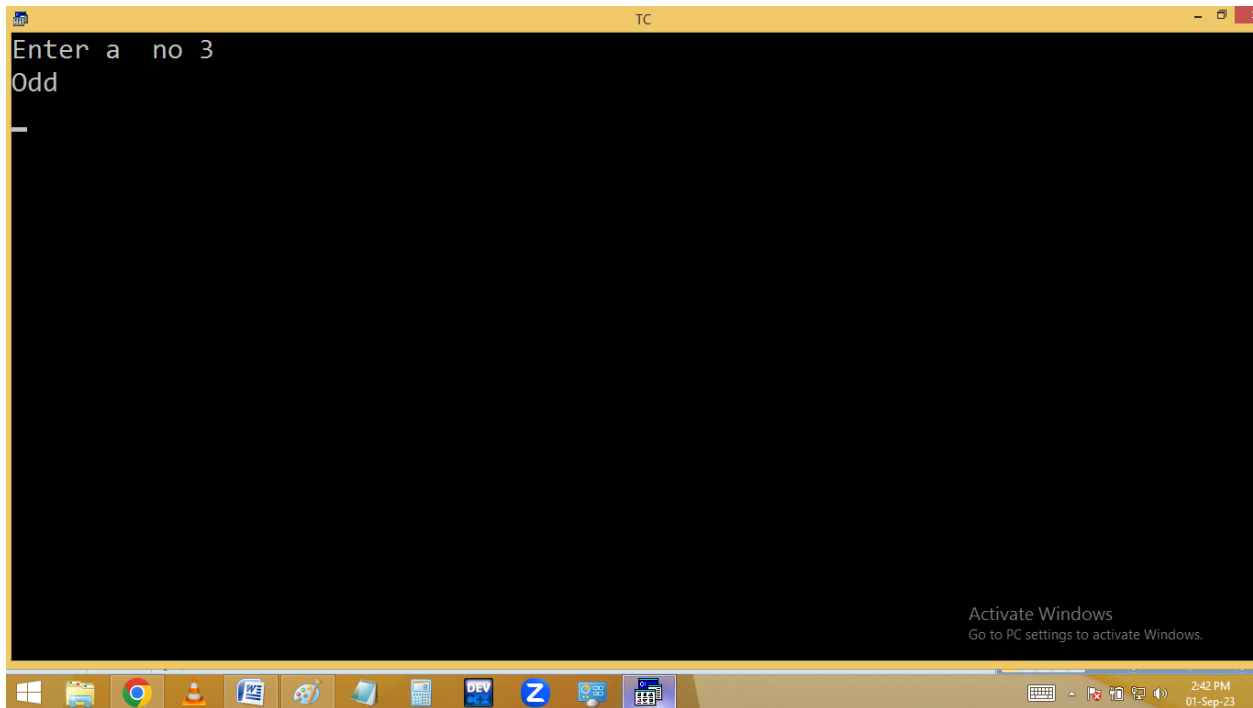
Without using arithmetic operators:



The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 8 Col 12 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter a no "); scanf("%d",&n);
if((n&1)==0)puts("Even"); else puts("Odd");
getch();
}
```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window.



The screenshot shows the Turbo C++ (TC) IDE with a black background, displaying the output of the program. The text 'Enter a no 3' and 'Odd' is visible on the first two lines. A cursor is positioned on the third line.

```
Enter a no 3
Odd
_
```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window.

```
TC
Enter a no 4
Even
```

Activate Windows
Go to PC settings to activate Windows.

$\text{if}(3 \& 1 == 0) \text{p}(\text{"Even"}); \text{else } \text{p}(\text{"Odd"});$

$3 = 11$
 $1 = \underline{01}$
 $01 = 1$

$\text{if}(4 \& 1 == 0) \text{p}(\text{"Even"}); \text{else } \text{p}(\text{"Odd"});$

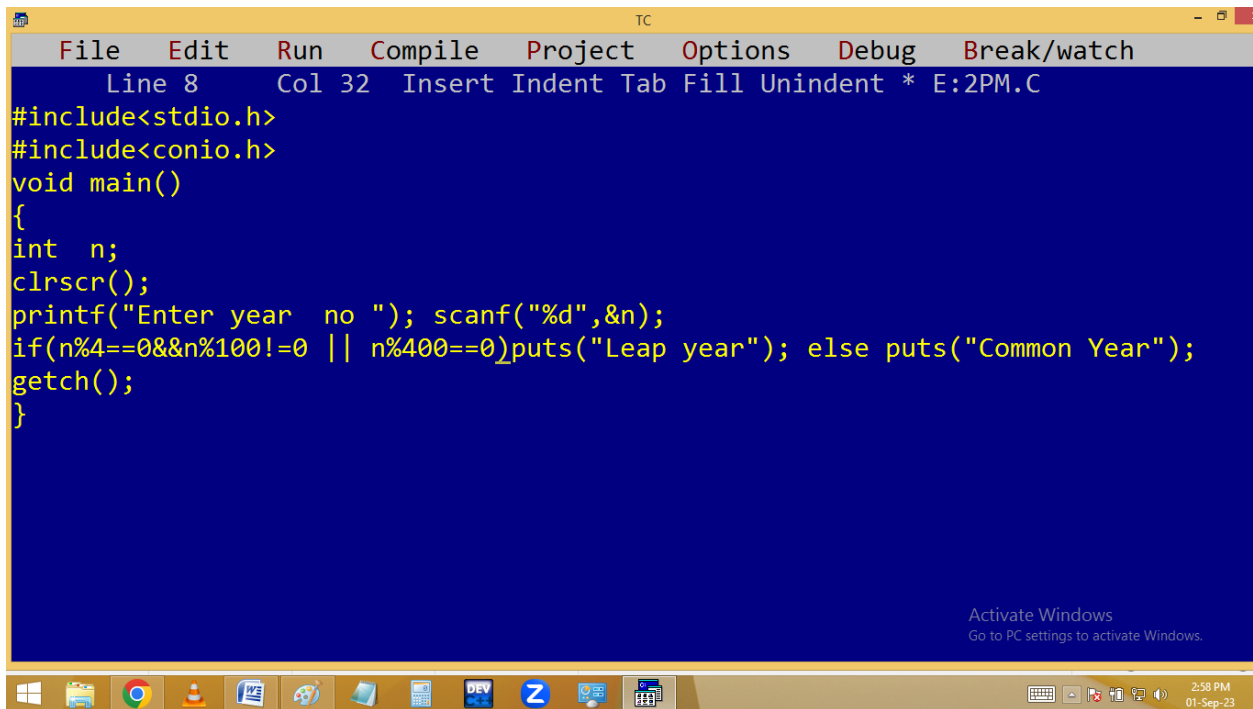
$4 = 100$
 $1 = \underline{001}$
 $000 = 0$

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

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

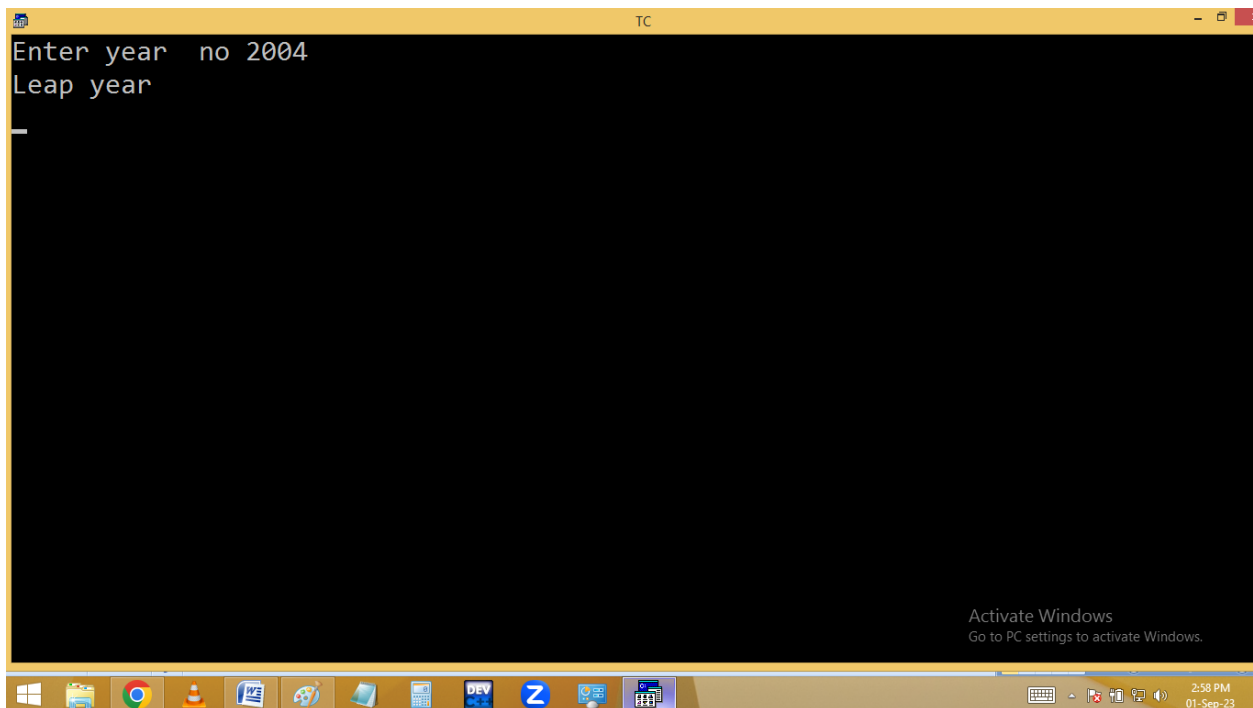
$$\begin{array}{r} 2 \overline{) 4} \\ 2 \overline{) 2 - 0} \\ 1 - 0 \end{array}$$

Finding leap year / common year:



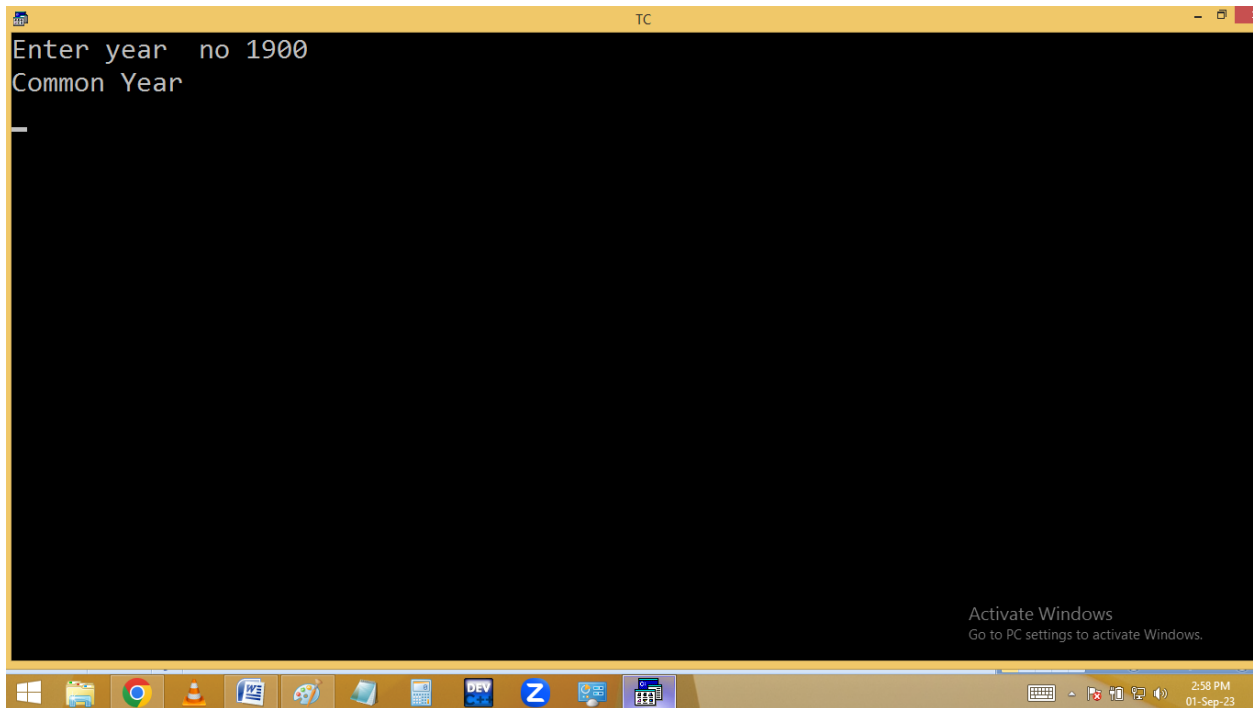
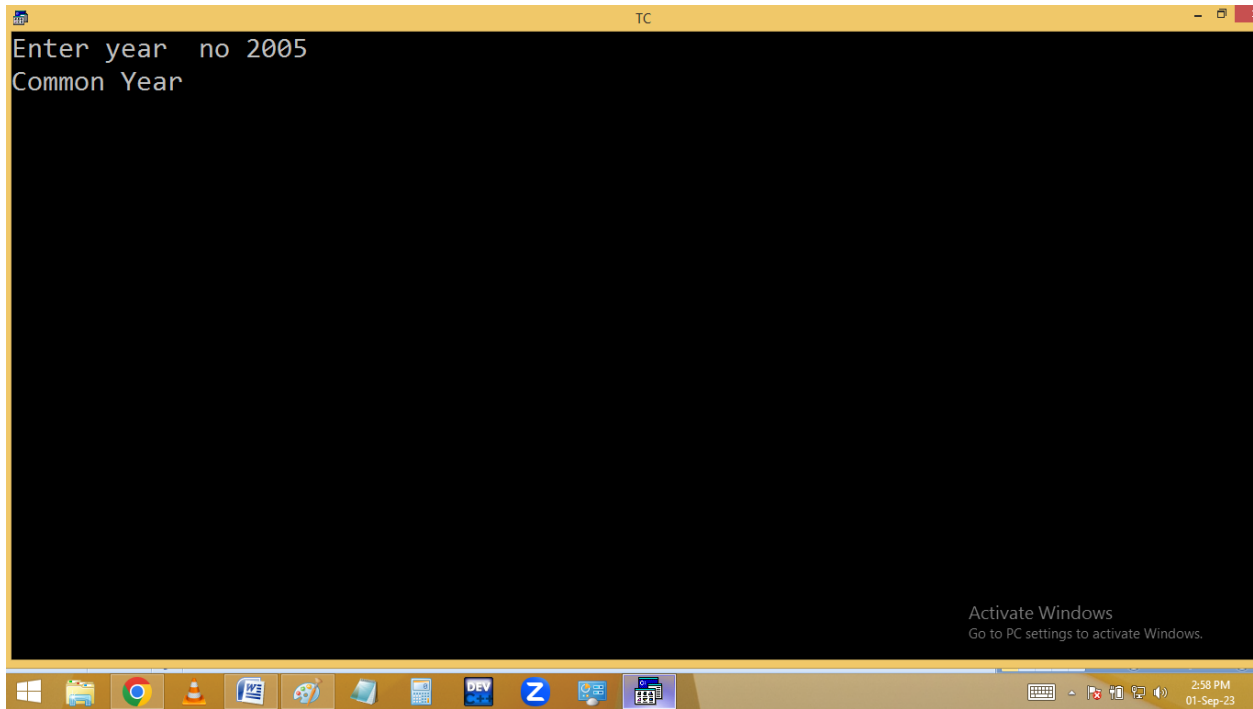
```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 32 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter year no "); scanf("%d",&n);
if(n%4==0&& n%100!=0 || n%400==0)puts("Leap year"); else puts("Common Year");
getch();
}
```

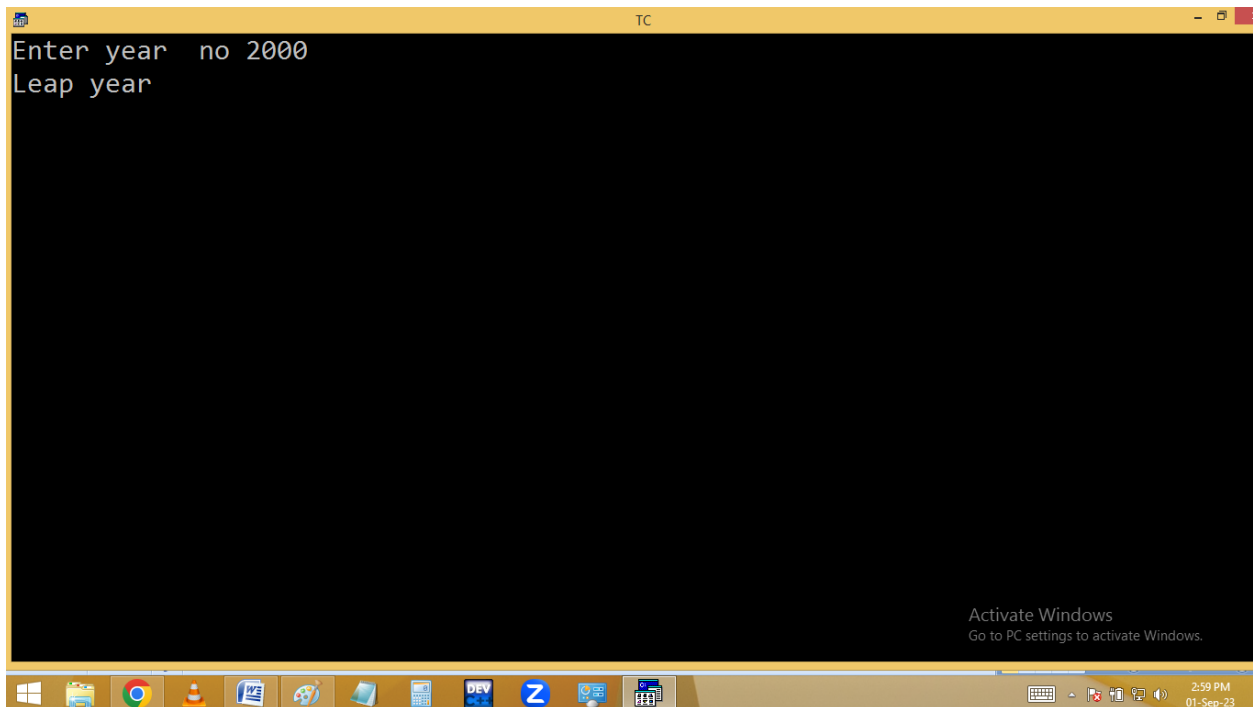
Activate Windows
Go to PC settings to activate Windows.



```
TC
Enter year no 2004
Leap year
_
```

Activate Windows
Go to PC settings to activate Windows.



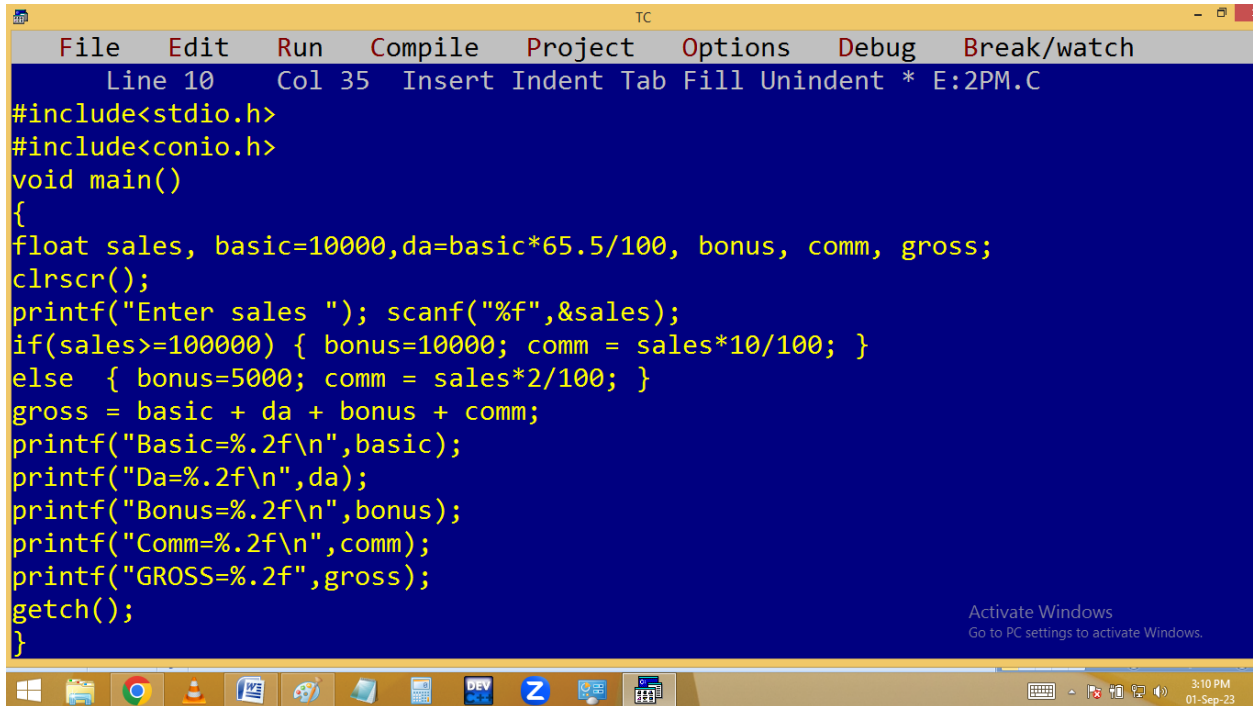


$$\begin{array}{r}
 4 \overline{) 1900} \quad (475 \\
 \underline{1900} \\
 0
 \end{array}
 \qquad
 \begin{array}{r}
 100 \overline{) 1900} \quad (19 \\
 \underline{1900} \\
 0
 \end{array}
 \qquad
 \begin{array}{r}
 400 \overline{) 1900} \quad (4 \\
 \underline{1600} \\
 300
 \end{array}$$

$$\begin{array}{r}
 400 \overline{) 2000} \quad (5 \\
 \underline{2000} \\
 0
 \end{array}
 \qquad
 \begin{array}{r}
 4 \overline{) 2024} \quad (506 \\
 \underline{2024} \\
 0
 \end{array}$$

Finding salesman gross salary using below table.

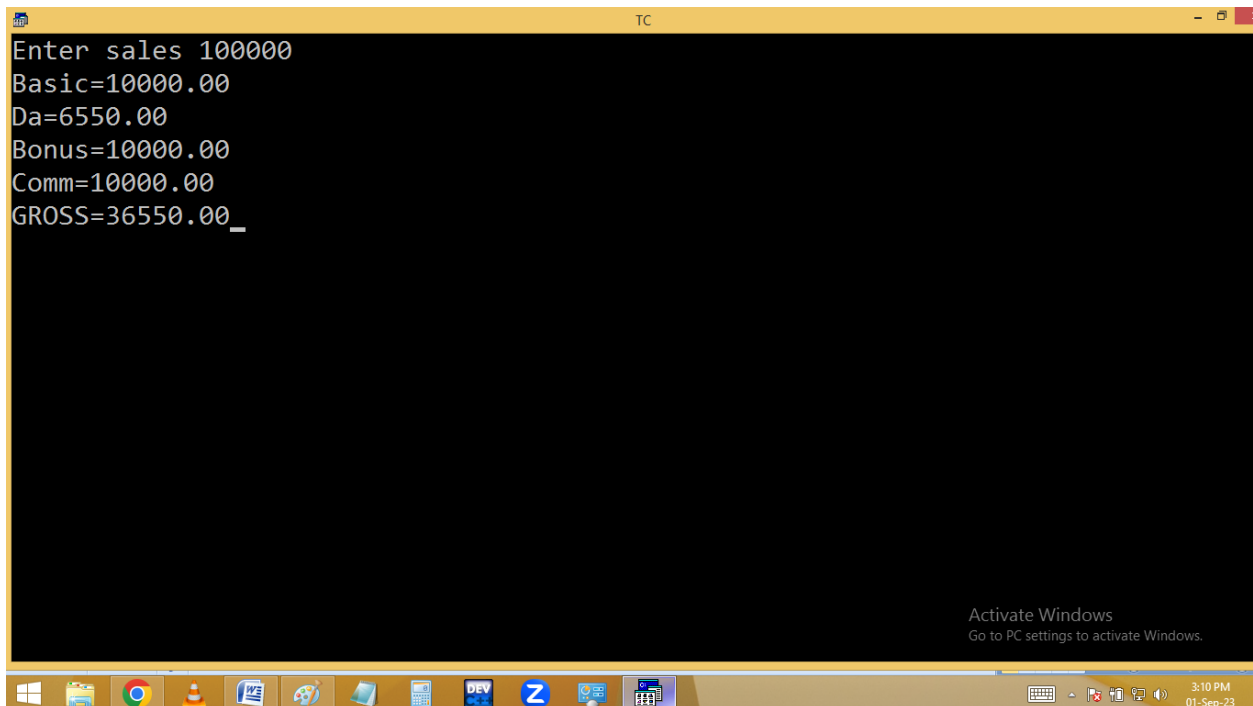
Sales \geq 100000	Sales $<$ 100000
Basic=10000	Basic=10000
Da=65.5%of basic	Da=65.5%of basic
Bonus=10000	Bonus=5000
Commission=10%of sales	Commission=2% of sales
Gross = basic + da + bonus + commission	



The screenshot shows the Turbo C++ IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 10, Col 35, Insert, Indent, Tab, Fill, Unindent, * E:2PM.C). The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
float sales, basic=10000,da=basic*65.5/100, bonus, comm, gross;
clrscr();
printf("Enter sales "); scanf("%f",&sales);
if(sales>=100000) { bonus=10000; comm = sales*10/100; }
else { bonus=5000; comm = sales*2/100; }
gross = basic + da + bonus + comm;
printf("Basic=%.2f\n",basic);
printf("Da=%.2f\n",da);
printf("Bonus=%.2f\n",bonus);
printf("Comm=%.2f\n",comm);
printf("GROSS=%.2f",gross);
getch();
}
```

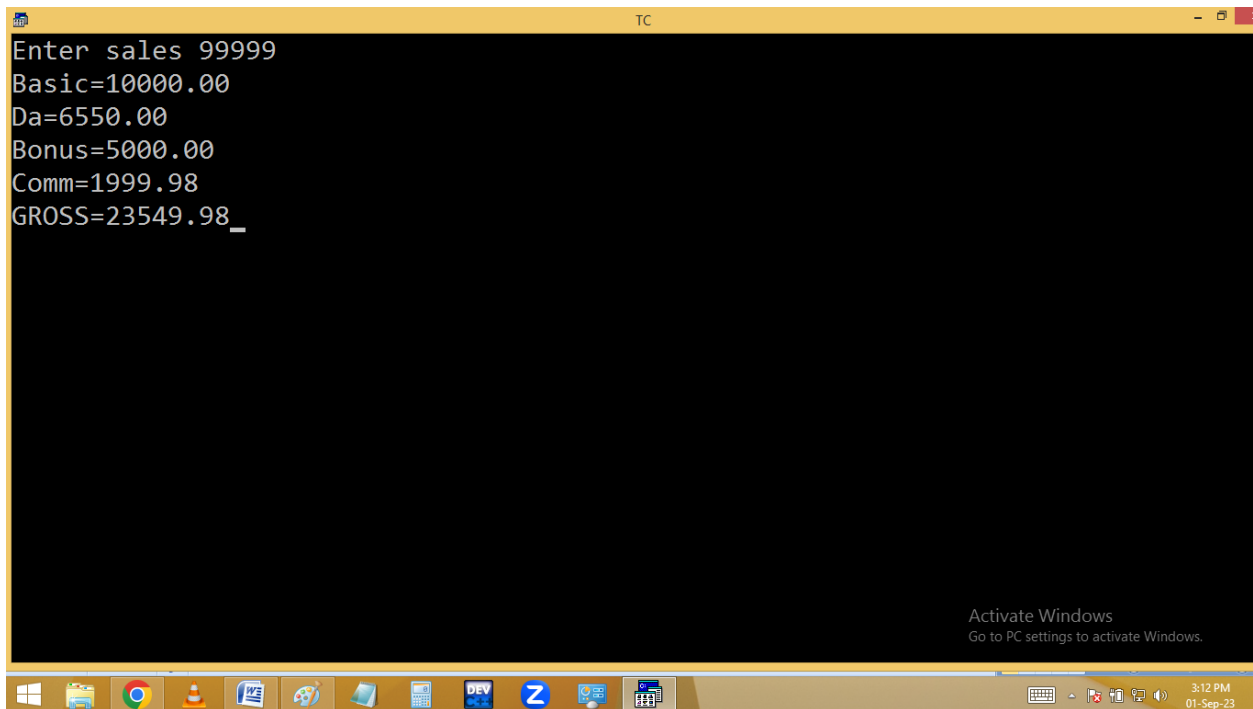
An "Activate Windows" watermark is visible in the bottom right corner of the IDE window.



The screenshot shows the Turbo C++ IDE with the same menu bar and status bar. The output of the program is displayed in the main window:

```
Enter sales 100000
Basic=10000.00
Da=6550.00
Bonus=10000.00
Comm=10000.00
GROSS=36550.00_
```

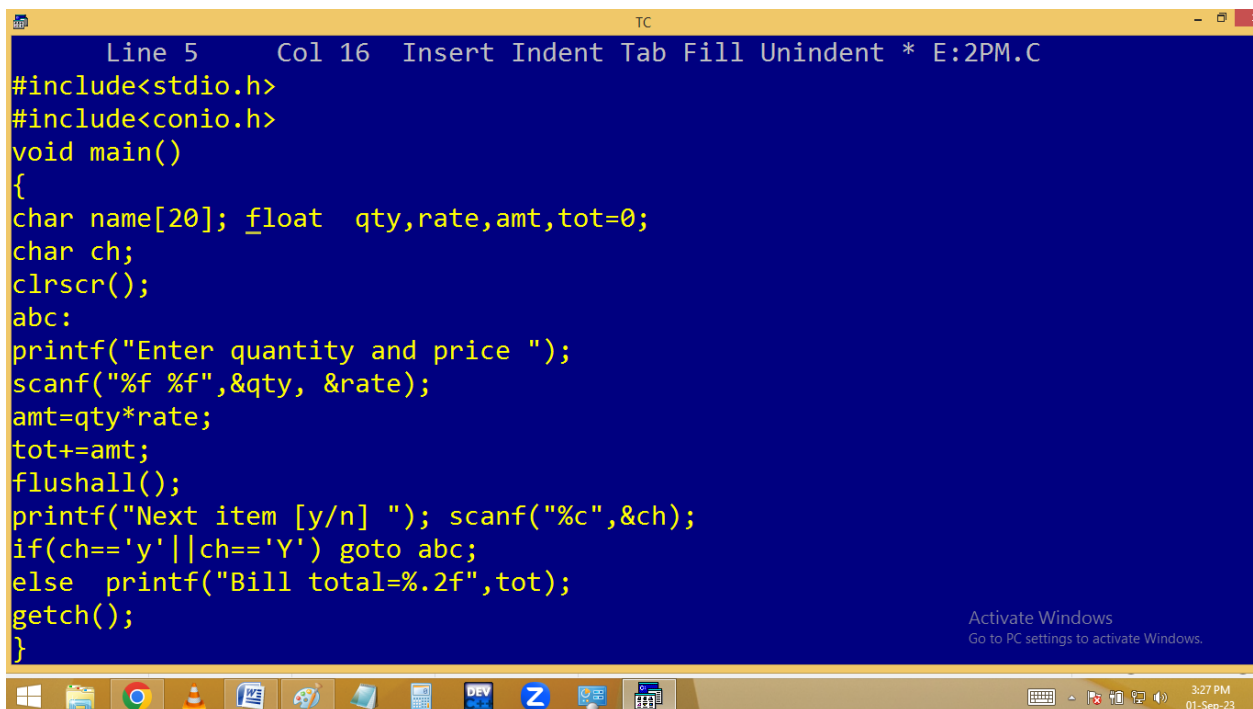
An "Activate Windows" watermark is visible in the bottom right corner of the IDE window.



A screenshot of a Turbo C++ (TC) console window. The window has a yellow title bar with the text "TC". The main area is black with white text. The text displayed is: "Enter sales 99999", "Basic=10000.00", "Da=6550.00", "Bonus=5000.00", "Comm=1999.98", and "GROSS=23549.98_". At the bottom right, there is a watermark that says "Activate Windows Go to PC settings to activate Windows." The Windows taskbar is visible at the bottom with various icons and a system clock showing 3:12 PM on 01-Sep-23.

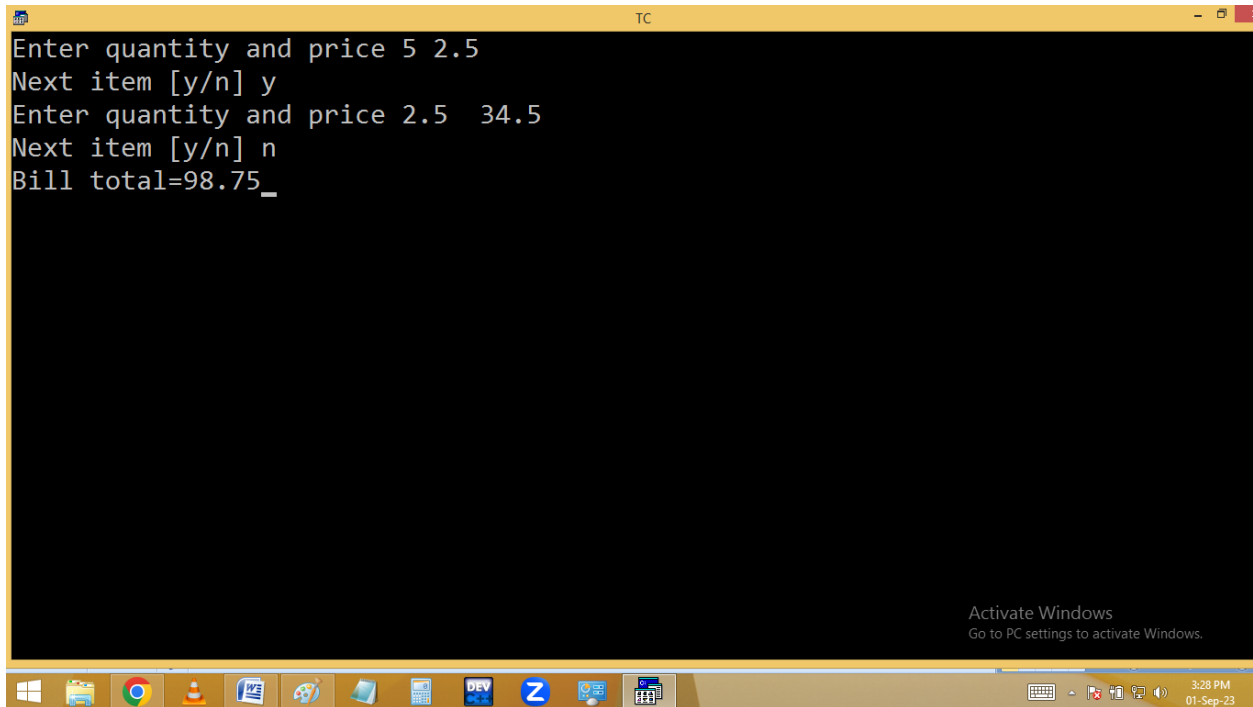
```
Enter sales 99999
Basic=10000.00
Da=6550.00
Bonus=5000.00
Comm=1999.98
GROSS=23549.98_
```

Finding customer Bill amount:



A screenshot of a Turbo C++ (TC) editor window. The window has a yellow title bar with the text "TC". The main area is blue with yellow text. The code is as follows: "#include<stdio.h>", "#include<conio.h>", "void main()", "{", "char name[20]; float qty,rate,amt,tot=0;", "char ch;", "clrscr();", "abc:", "printf(\"Enter quantity and price \");", "scanf(\"%f %f\",&qty, &rate);", "amt=qty*rate;", "tot+=amt;", "flushall();", "printf(\"Next item [y/n] \"); scanf(\"%c\",&ch);", "if(ch=='y' || ch=='Y') goto abc;", "else printf(\"Bill total=%.2f\",tot);", "getch();", "}". At the top, a status bar shows "Line 5 Col 16 Insert Indent Tab Fill Unindent * E:2PM.C". At the bottom right, there is a watermark that says "Activate Windows Go to PC settings to activate Windows." The Windows taskbar is visible at the bottom with various icons and a system clock showing 3:27 PM on 01-Sep-23.

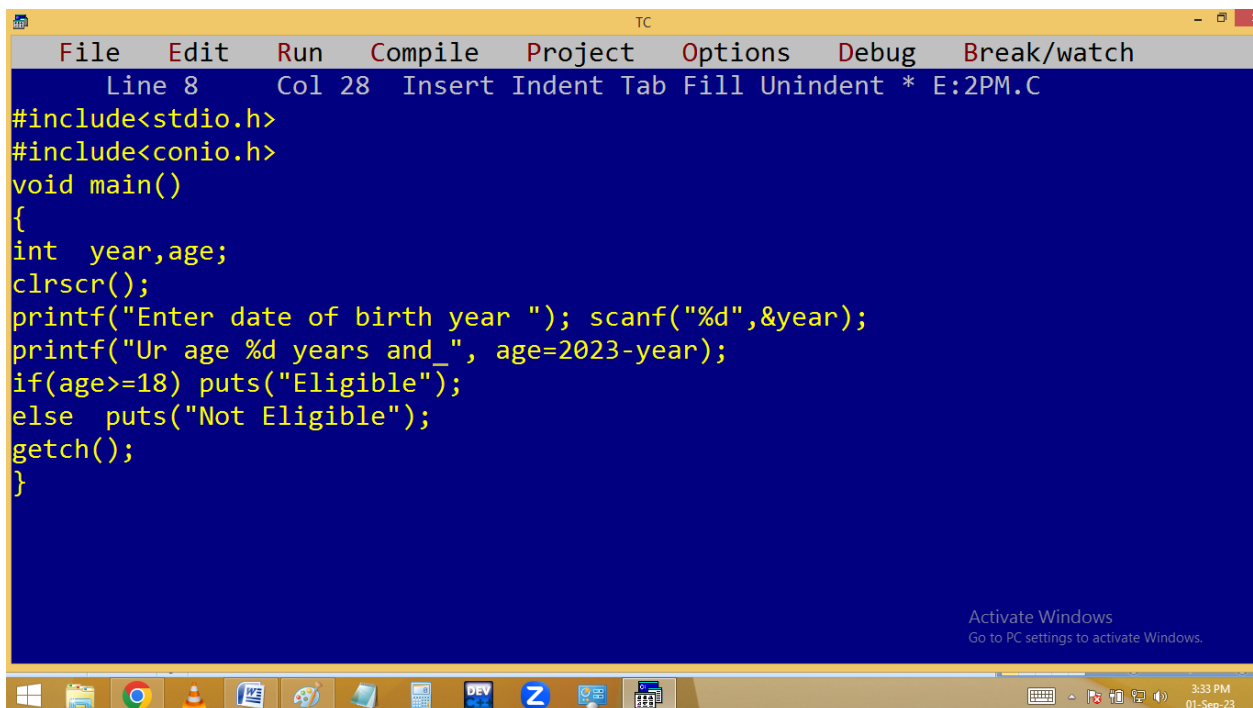
```
Line 5 Col 16 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char name[20]; float qty,rate,amt,tot=0;
char ch;
clrscr();
abc:
printf("Enter quantity and price ");
scanf("%f %f",&qty, &rate);
amt=qty*rate;
tot+=amt;
flushall();
printf("Next item [y/n] "); scanf("%c",&ch);
if(ch=='y' || ch=='Y') goto abc;
else printf("Bill total=%.2f",tot);
getch();
}
```



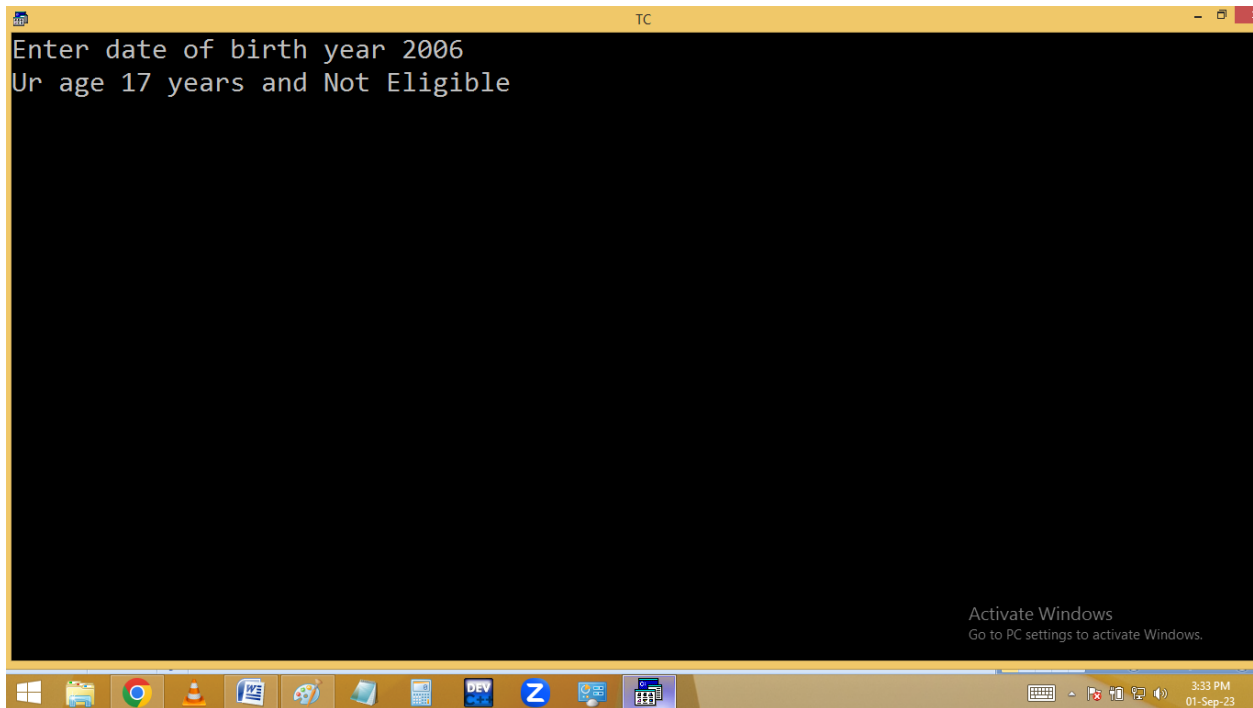
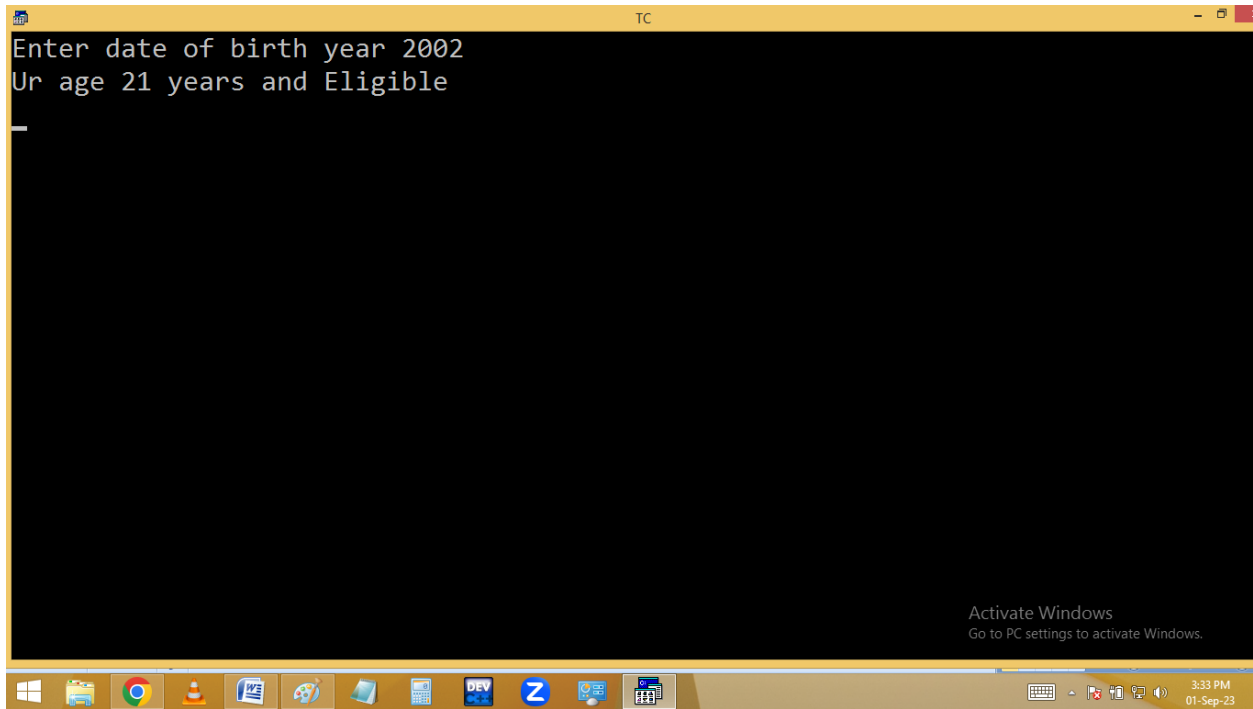
```
TC
Enter quantity and price 5 2.5
Next item [y/n] y
Enter quantity and price 2.5 34.5
Next item [y/n] n
Bill total=98.75_

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

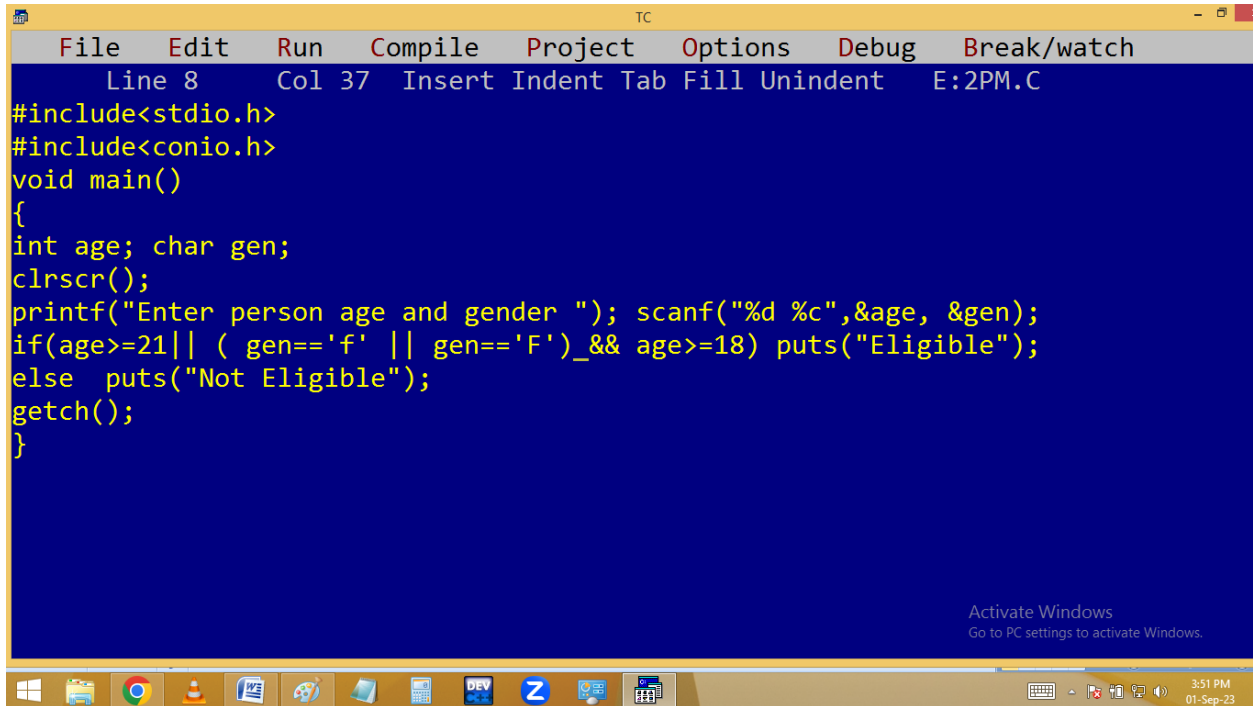
Finding voter eligibility:



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 28 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int year,age;
clrscr();
printf("Enter date of birth year "); scanf("%d",&year);
printf("Ur age %d years and_", age=2023-year);
if(age>=18) puts("Eligible");
else puts("Not Eligible");
getch();
}
```



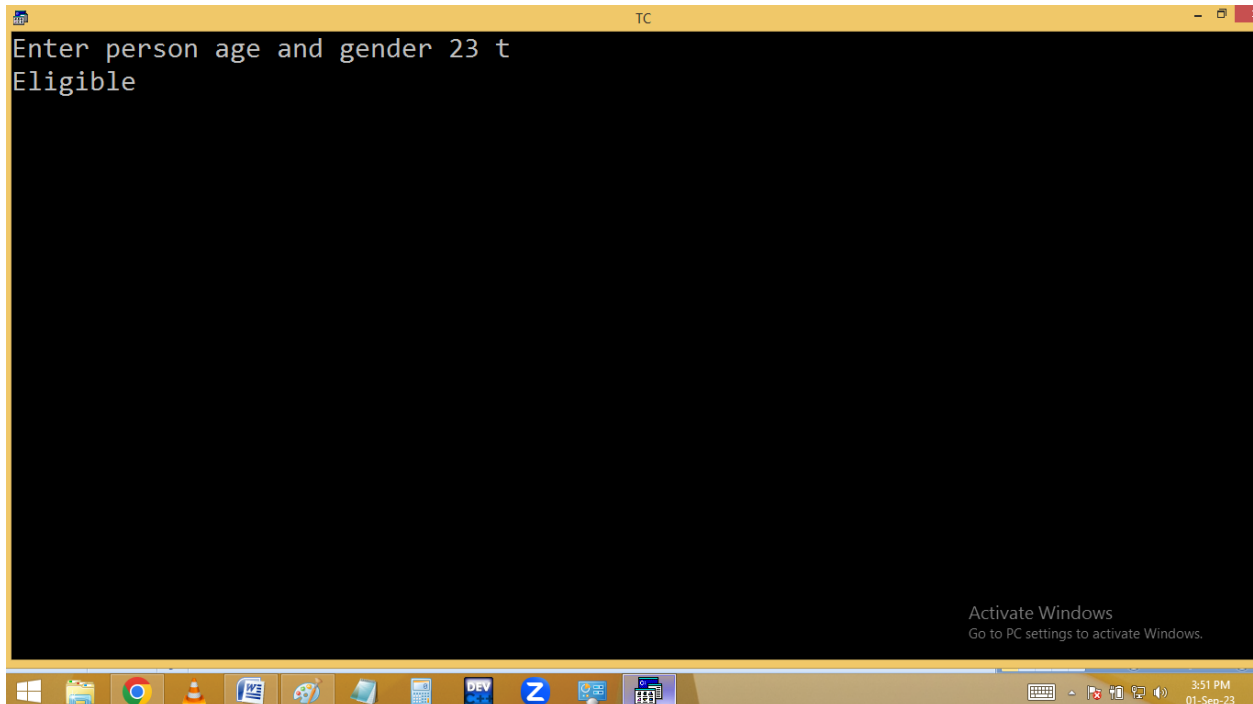
Finding marriage eligibility:



The screenshot shows the Turbo C++ (TC) IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 8, Col 37, Insert, Indent, Tab, Fill, Unindent, E:2PM.C). The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int age; char gen;
    clrscr();
    printf("Enter person age and gender "); scanf("%d %c",&age, &gen);
    if(age>=21|| ( gen=='f' || gen=='F')_&& age>=18) puts("Eligible");
    else puts("Not Eligible");
    getch();
}
```

The Windows taskbar at the bottom shows the Start button and several application icons. The system clock indicates 3:51 PM on 01-Sep-23.



The screenshot shows the Turbo C++ (TC) IDE with the same menu bar and status bar as the previous image. The output window displays the program's execution:

```
Enter person age and gender 23 t
Eligible
```

The Windows taskbar at the bottom is identical to the previous image, showing the system clock at 3:51 PM on 01-Sep-23.

