

Generating electricity bill:

SLAB SYSTEM

NO OF UNITS	UNIT PRICE
1-50	1.45
51-100	2.80
101-200	3.05
201-300	4.75
301-500	6.00
>500	6.25

$$30 * 1.45 = 43.5$$

$$80 \rightarrow 50 * 1.45 + 30 * 2.8 = 156.5$$

$$180 \rightarrow 50 * 1.45 + 50 * 2.8 + 80 * 3.05 = 456.5$$

$$280 \rightarrow 50 * 1.45 + 50 * 2.8 + 100 * 3.05 + 80 * 4.75 = 897.5$$

637 →

$50 * 1.45 + 50 * 2.8 + 100 * 3.05 + 100 * 4.75 + 200 * 6 + 137 * 6.25 = 3048.75$

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
void main()
```

```
{
```

```
long serno,pre,cur,units;
```

```
char name[30];
```

```
float amt;
```

```
clrscr();
```

```
printf("Enter service number ");
```

```
scanf("%ld",&serno);
```

```
printf("Enter consumer name ");
```

```
scanf("%s",&name);
```

```
printf("Enter previous month reading ");  
scanf("%ld",&pre);
```

start:

```
printf("Enter current month reading  
");scanf("%ld",&cur);
```

```
if(cur<pre){printf("\aCheck current month  
reading\n");goto start;}
```

```
units = cur - pre;
```

```
if(units<=50)amt=units*1.45;
```

```
else if(units<=100) amt=50*1.45+(units-50)*2.8;
```

```
else if(units<=200) amt=50*1.45+50*2.8+(units-  
100)*3.05;
```

```
else if(units<=300)
```

```
amt=50*1.45+50*2.8+100*3.05+(units-200)*4.75;
```

```
else if(units<=500)
```

```
amt=50*1.45+50*2.8+100*3.05+100*4.75+(units-  
300)*6;
```

else

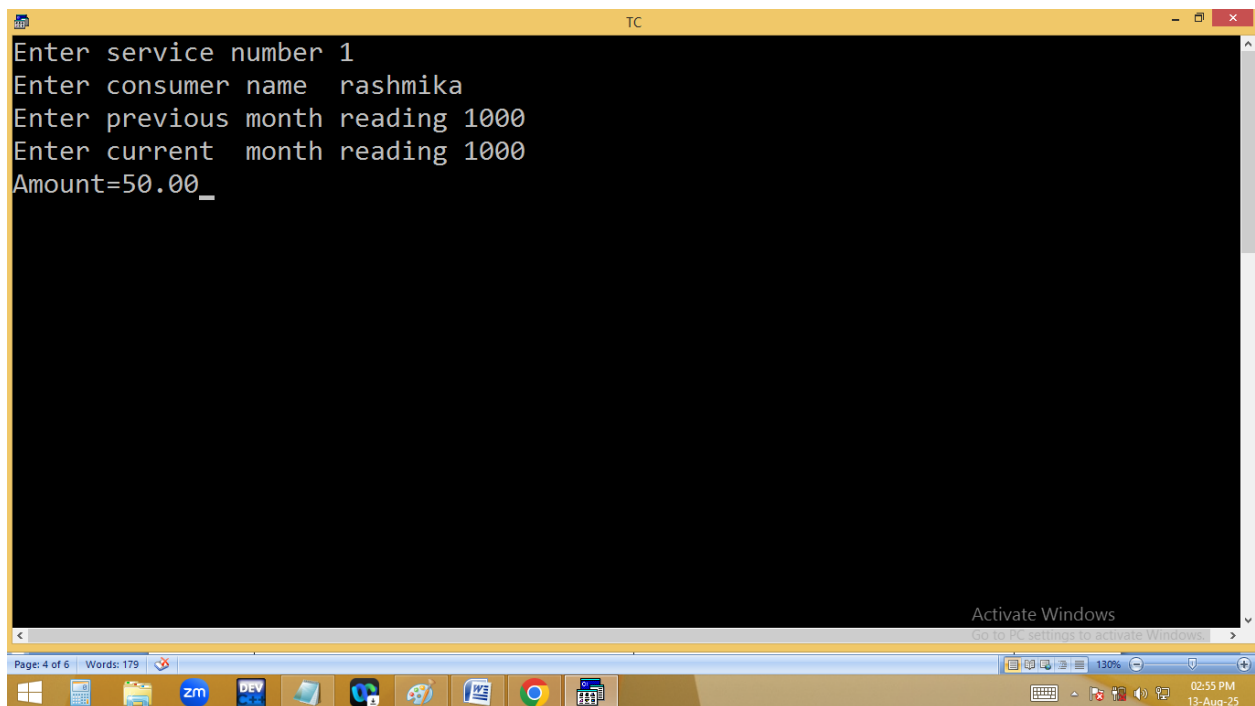
**amt=50*1.45+50*2.8+100*3.05+100*4.75+200*6+(
units-500)*6.25;**

if(amt<50) amt=50;

printf("Amount=%.2f",amt);

getch();

}



The screenshot shows a Windows 10 desktop environment. A window titled "TC" (Turbo C++) is open, displaying the following text: "Enter service number 1", "Enter consumer name rashmika", "Enter previous month reading 1000", "Enter current month reading 1000", and "Amount=50.00_". The window has a yellow title bar and standard Windows window controls. Below the window is the Windows taskbar, which includes the Start button, a search bar, and several pinned application icons: File Explorer, Zoho Mail (zm), DEV, a folder icon, a game icon, a document icon, Google Chrome, and a calculator. The system tray on the right shows the date and time as "02:55 PM 13-Aug-25". An "Activate Windows" watermark is visible in the bottom right corner of the desktop area.

```
TC
Enter service number 2
Enter consumer name vijay
Enter previous month reading 1200
Enter current month reading 1500
Amount=992.50

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

```
TC
Enter service number 3
Enter consumer name samantha
Enter previous month reading 1200
Enter current month reading -1000
Check current month reading
Enter current month reading 1300
Amount=212.50

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

Read a stu id, name, 6 sub marks. Find tot, avg and grade based on below avg.

Avg	Grade
>=80	Distinction
>=60	1st
>=50	2nd
>=35	3rd class
<35	Fail

```

Line 5      Col 68  Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int id, tel,eng,hin,mat,sci,soc,tot,pass=0;char name[20];float avg;clrscr();
printf("Enter stu id, name, 6 sub marks ");
scanf("%d%s%d%d%d%d%d",&id,name,&tel,&eng,&hin,&mat,&sci,&soc);
tot=tel+eng+hin+mat+sci+soc;
avg=tot/6.0;
printf("%s id=%d, Tot=%d, Avg=%.2f, Grade=",name,id,tot,avg);
if(tel>=35&&eng>=35&&hin>=35&&mat>=35&&sci>=35&&soc>=35)pass=1;
if(pass==0)puts("Failed");
else if(avg>=80)puts("Distinction");
else if(avg>=60)puts("1st class");
else if(avg>=50)puts("2nd class");
else puts("3rd class");
getch();
}

```

Activate Windows
Go to PC settings to activate Windows.

03:13 PM
13-Aug-25

```
TC
Enter stu id, name, 6 sub marks 1 bablu 20 34 45 54 44 55
bablu id=1, Tot=252, Avg=42.00, Grade=Failed
```

Page: 6 of 8 Words: 179

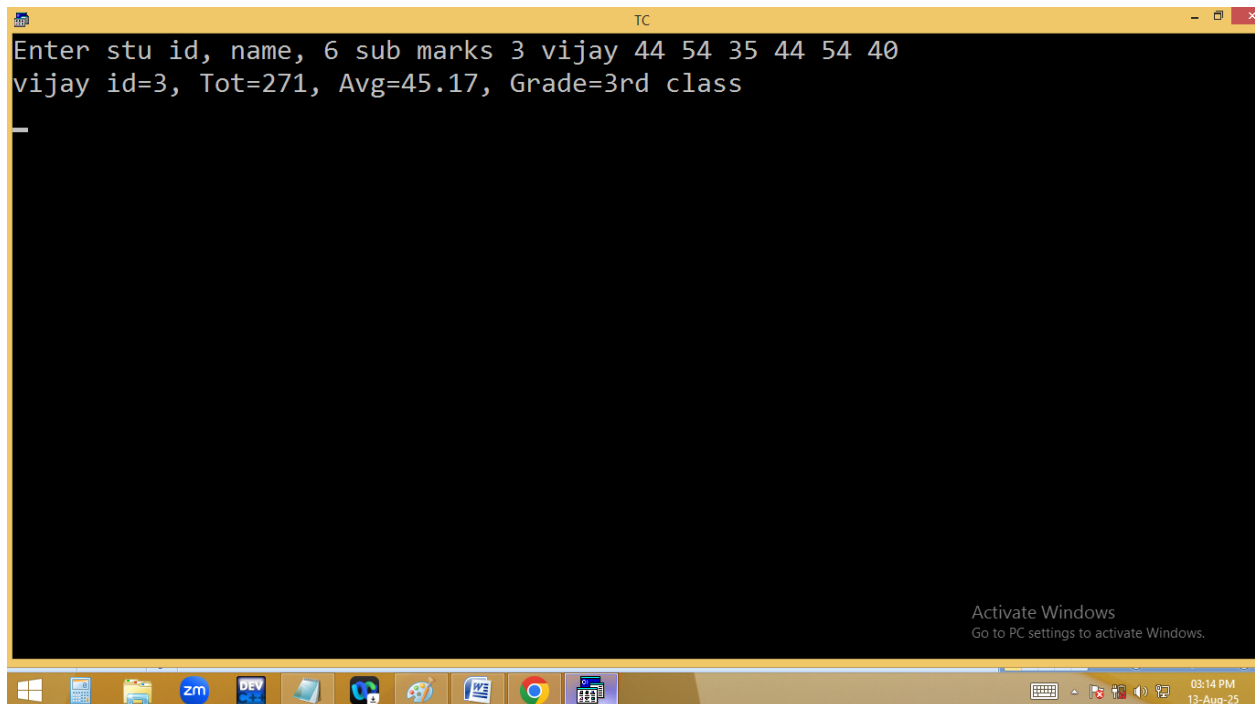
Activate Windows
Go to PC settings to activate Windows.

03:14 PM
13-Aug-25

```
TC
Enter stu id, name, 6 sub marks 2 bunny 77 88 78 90 98 78
bunny id=2, Tot=509, Avg=84.83, Grade=Distinction
```

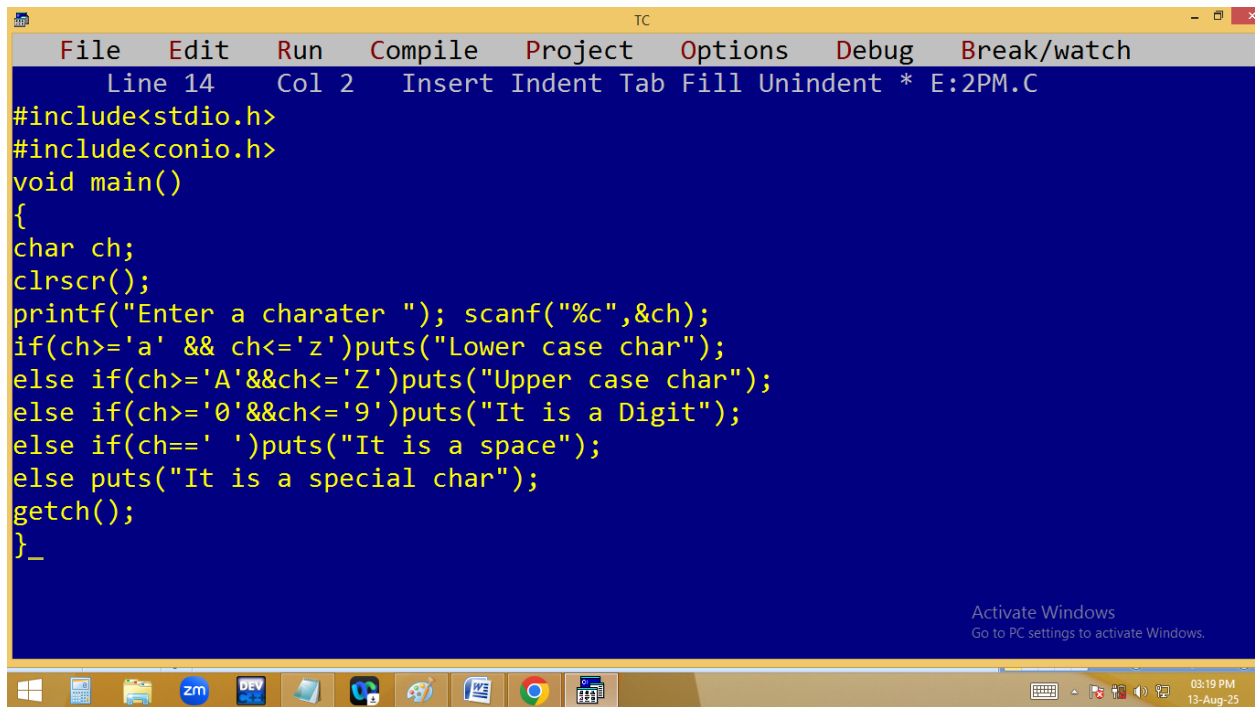
Activate Windows
Go to PC settings to activate Windows.

03:14 PM
13-Aug-25



```
TC
Enter stu id, name, 6 sub marks 3 vijay 44 54 35 44 54 40
vijay id=3, Tot=271, Avg=45.17, Grade=3rd class
```

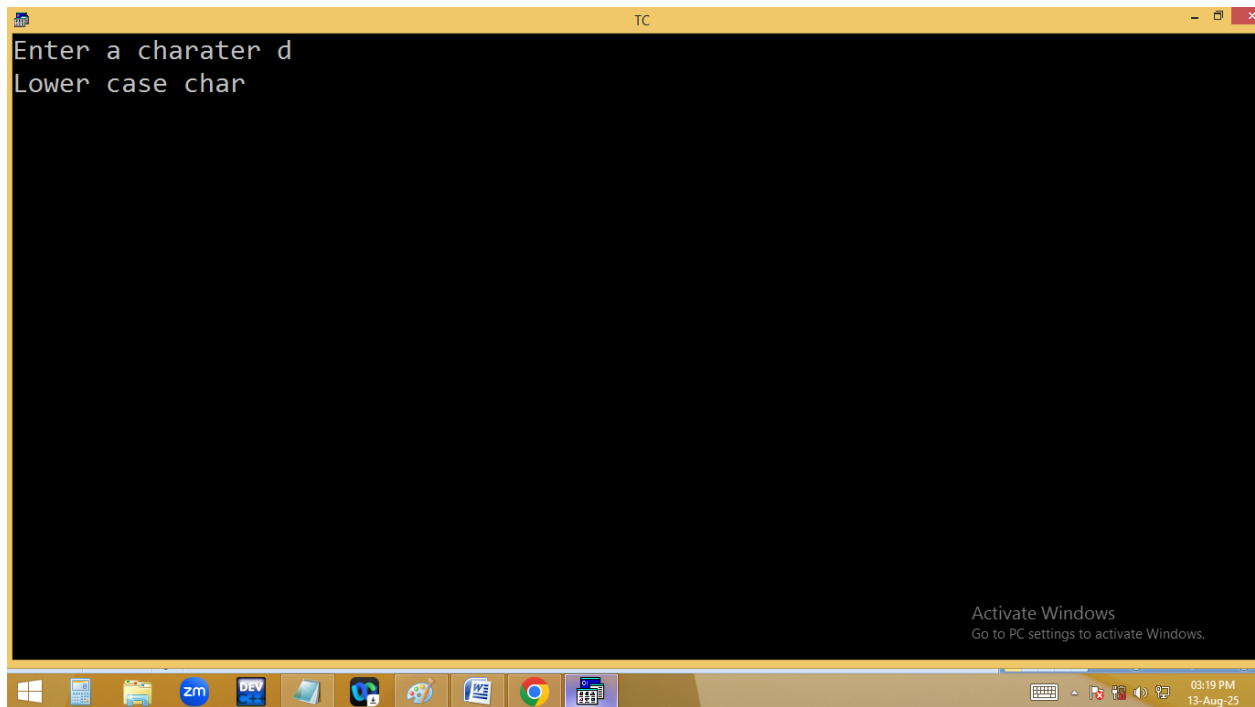
**Read a character and find out it is lower /
upper / digit / space / special char.**



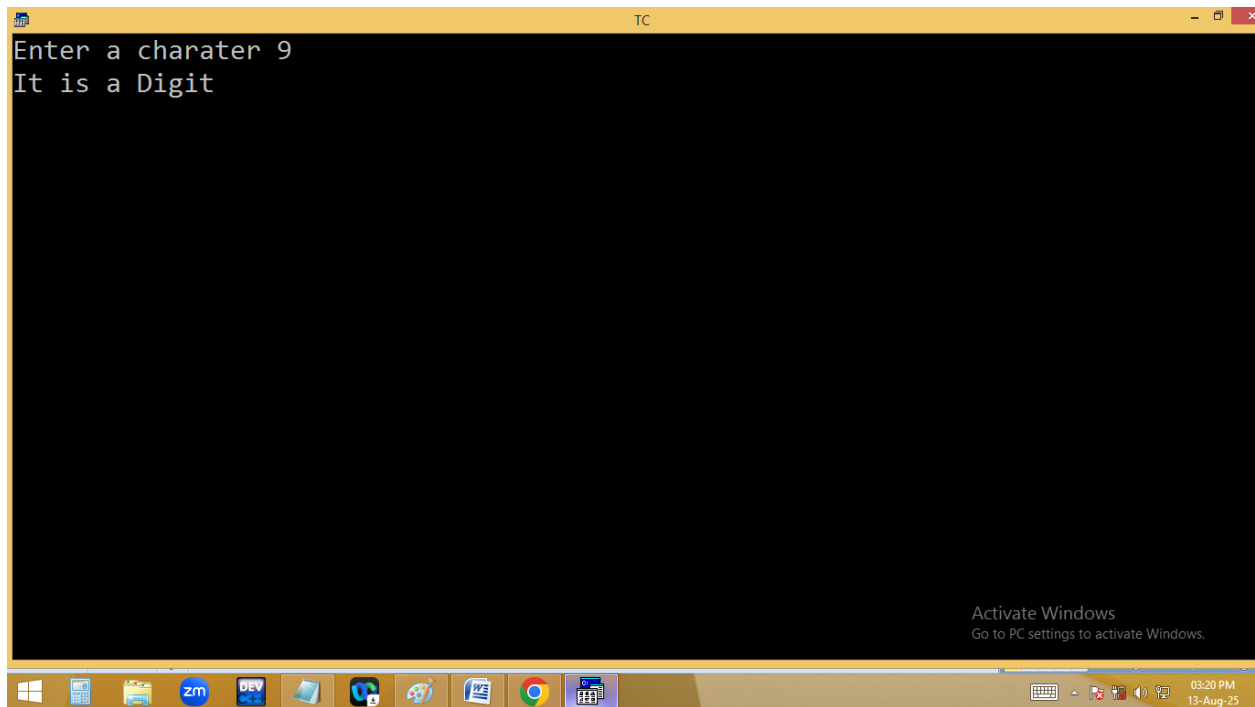
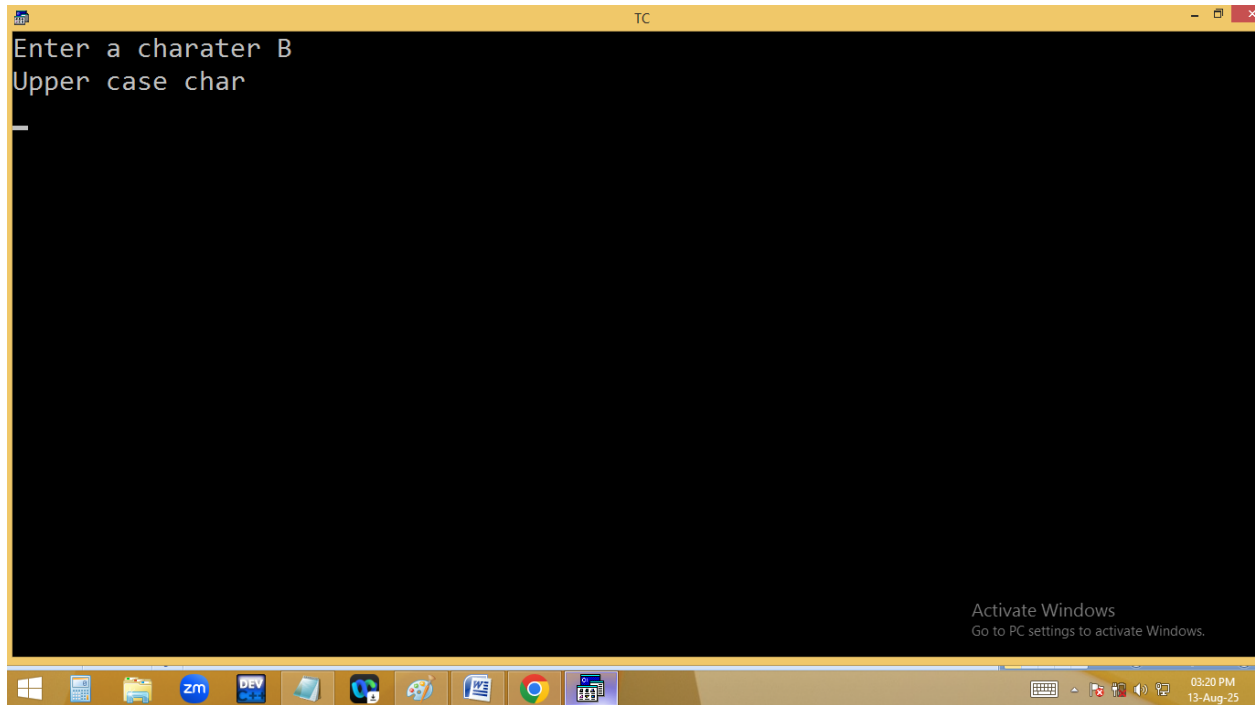
The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates "Line 14 Col 2 Insert Indent Tab Fill Unindent * E:2PM.C". The code is as follows:

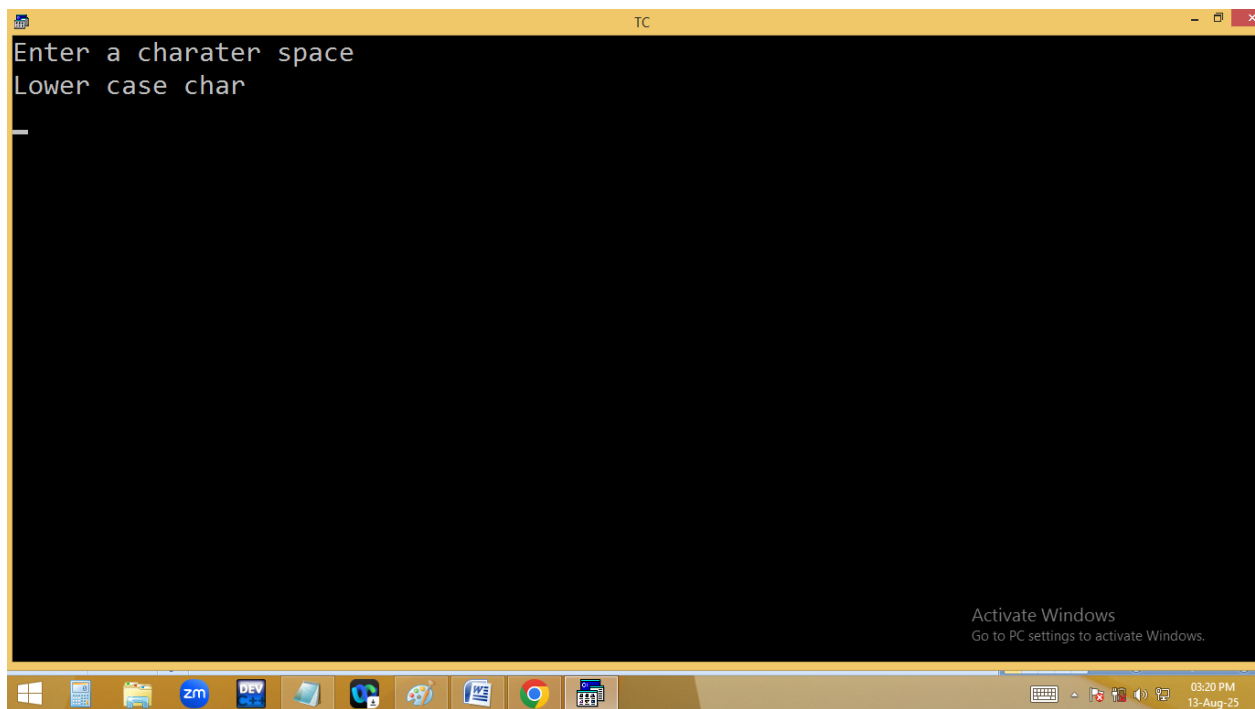
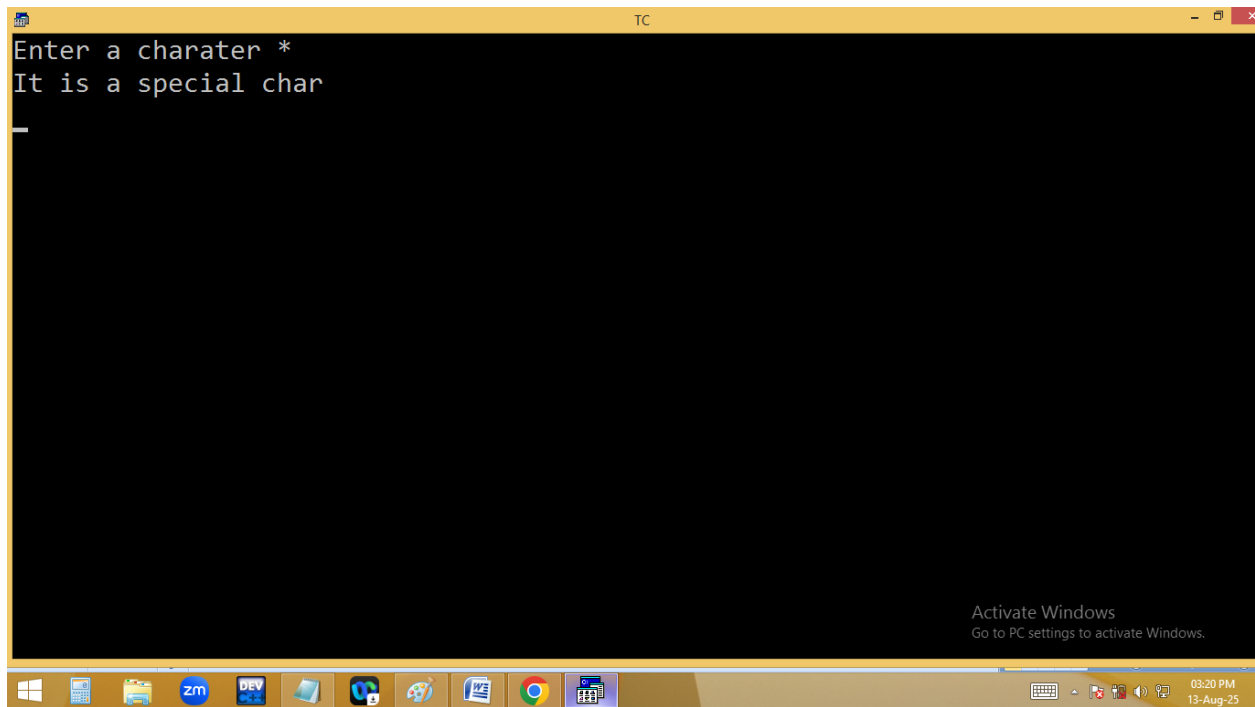
```
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); scanf("%c",&ch);
if(ch>='a' && ch<='z')puts("Lower case char");
else if(ch>='A'&&ch<='Z')puts("Upper case char");
else if(ch>='0'&&ch<='9')puts("It is a Digit");
else if(ch==' ')puts("It is a space");
else puts("It is a special char");
getch();
}_
```

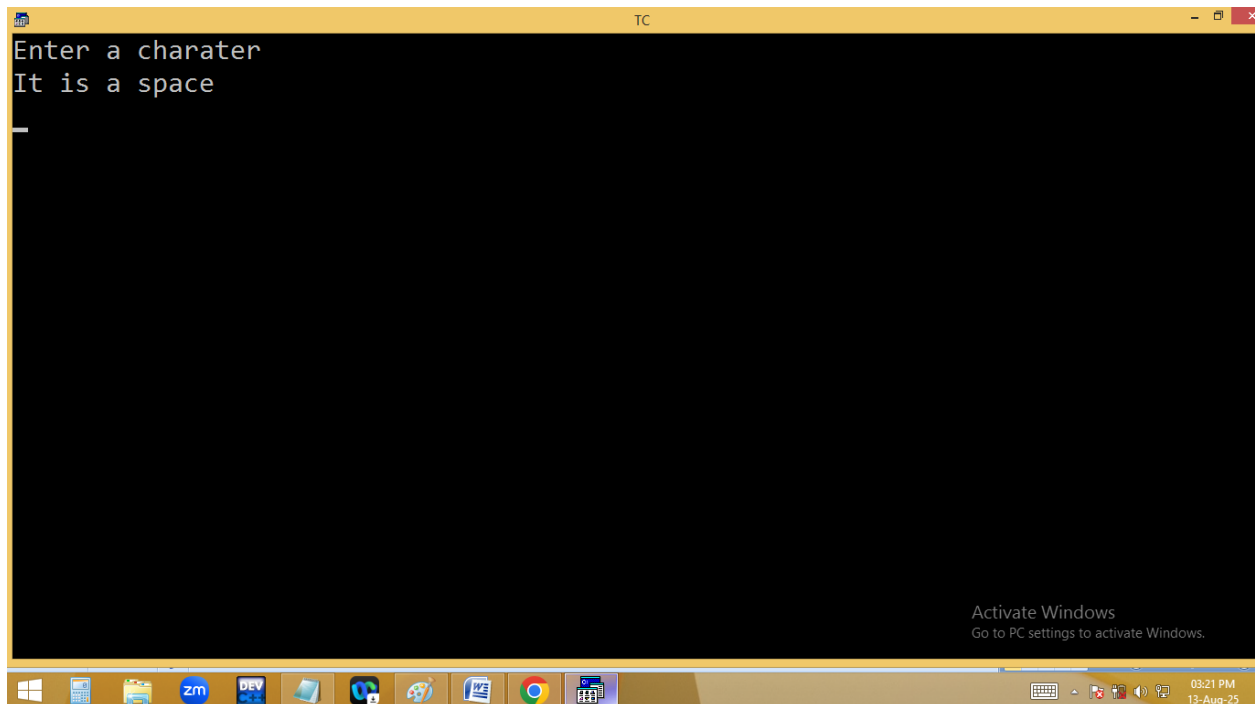
An "Activate Windows" watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various icons including the Start button, File Explorer, Zoho Mail, DEV C++, and others, with the system clock showing 03:19 PM on 13-Aug-25.



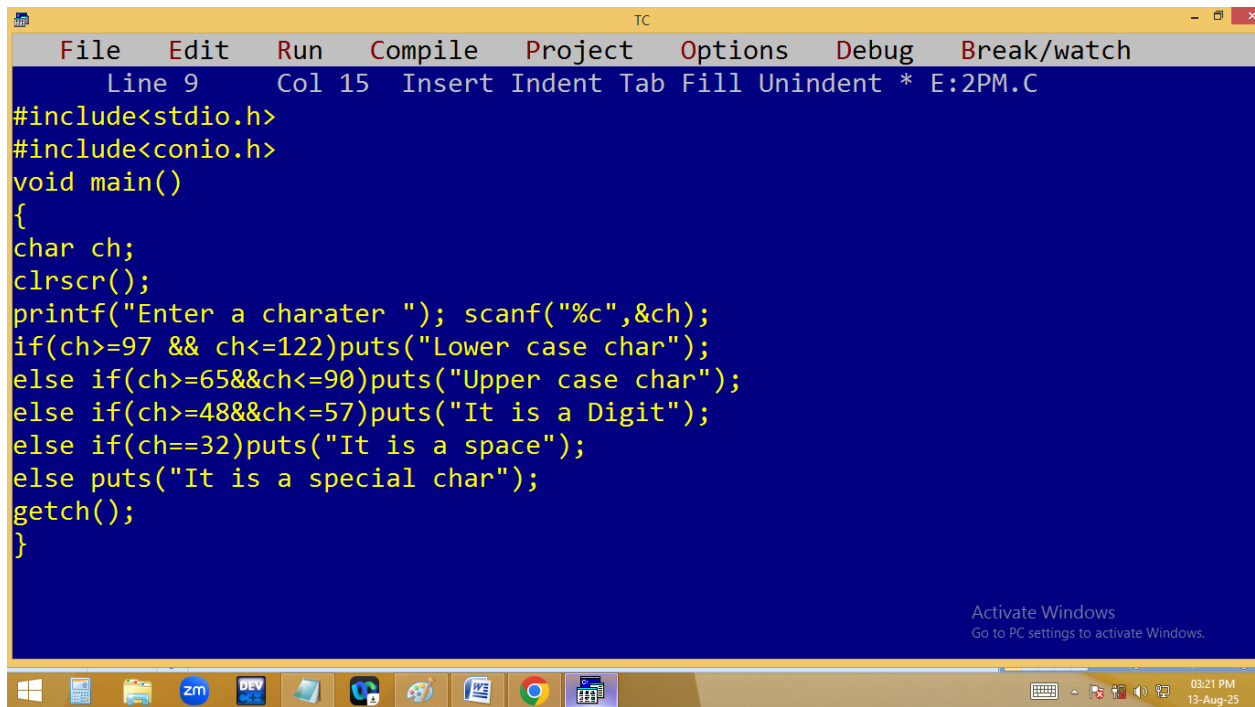
The screenshot shows the same Turbo C++ IDE window after the program has been executed. The output area is black, and the text "Enter a charater d" and "Lower case char" is visible, indicating that the user entered the character 'd' and the program correctly identified it as a lowercase character. The "Activate Windows" watermark and the Windows taskbar are also present, with the system clock showing 03:19 PM on 13-Aug-25.







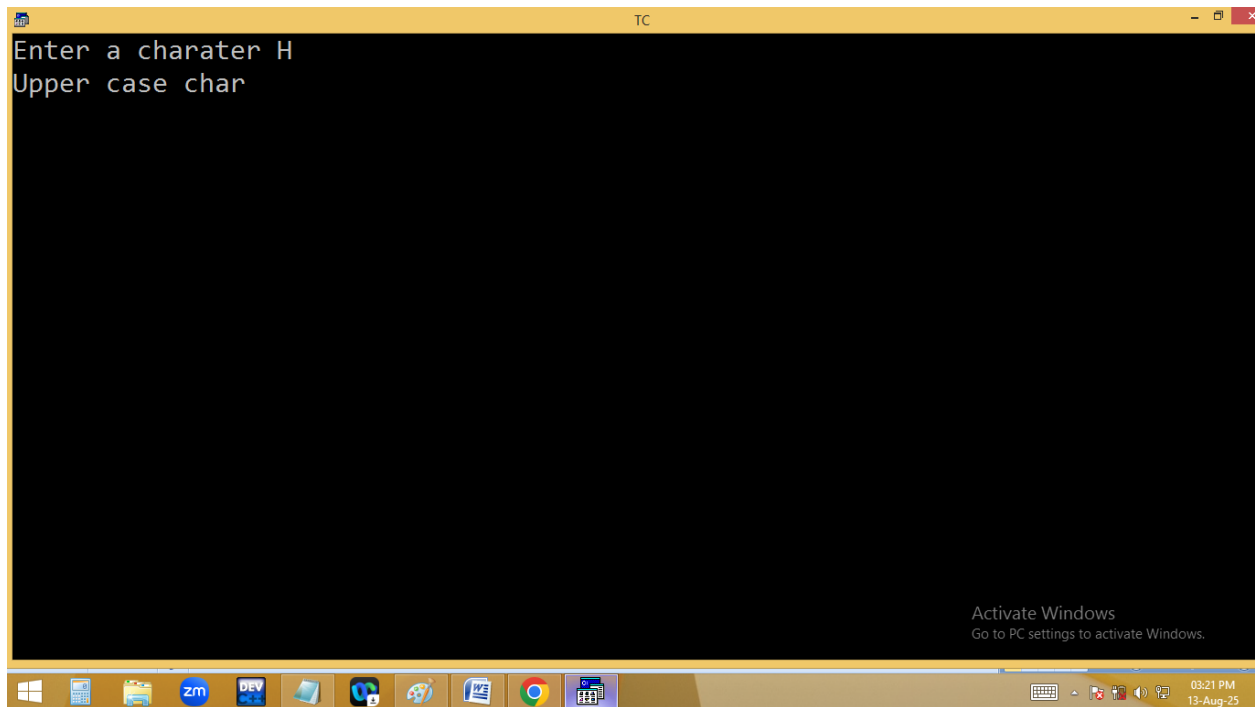
Using ascii values:



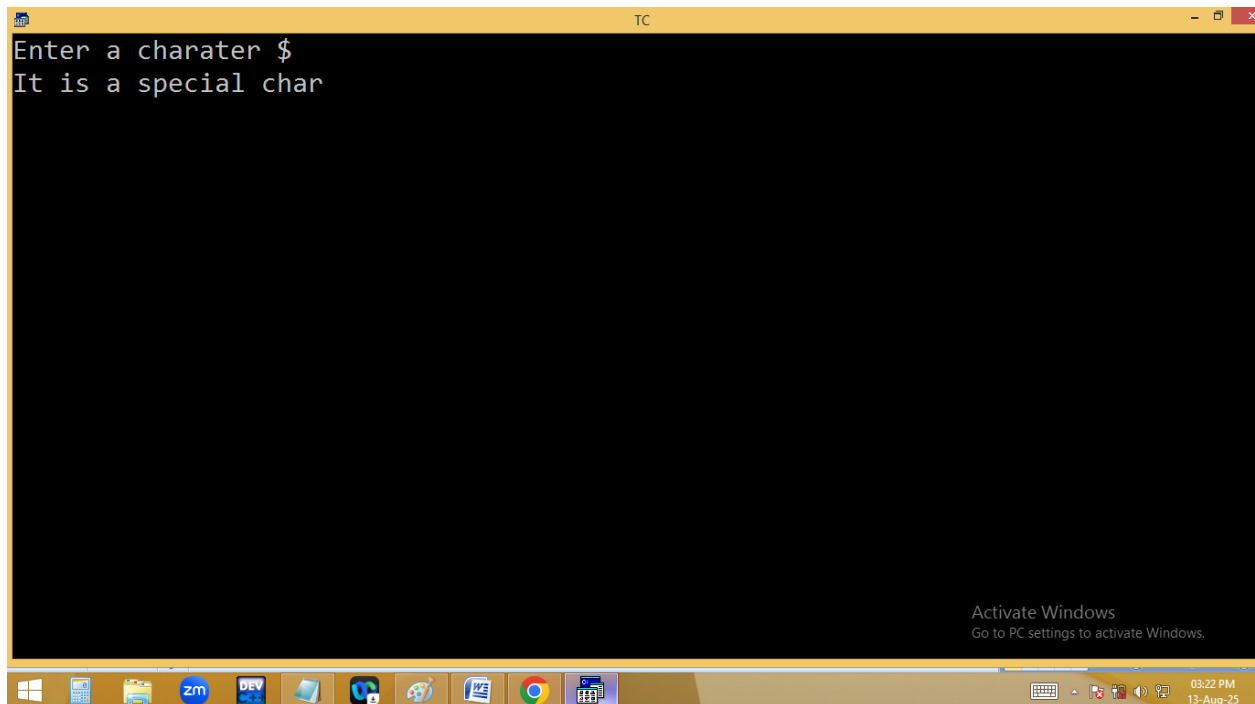
The screenshot shows the Turbo C++ (TC) IDE with a yellow title bar and a menu bar containing File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 9 Col 15 Insert Indent Tab Fill Unindent * E:2PM.C'. The main editing area has a blue background and contains the following C code:

```
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); scanf("%c",&ch);
if(ch>=97 && ch<=122)puts("Lower case char");
else if(ch>=65&&ch<=90)puts("Upper case char");
else if(ch>=48&&ch<=57)puts("It is a Digit");
else if(ch==32)puts("It is a space");
else puts("It is a special char");
getch();
}
```

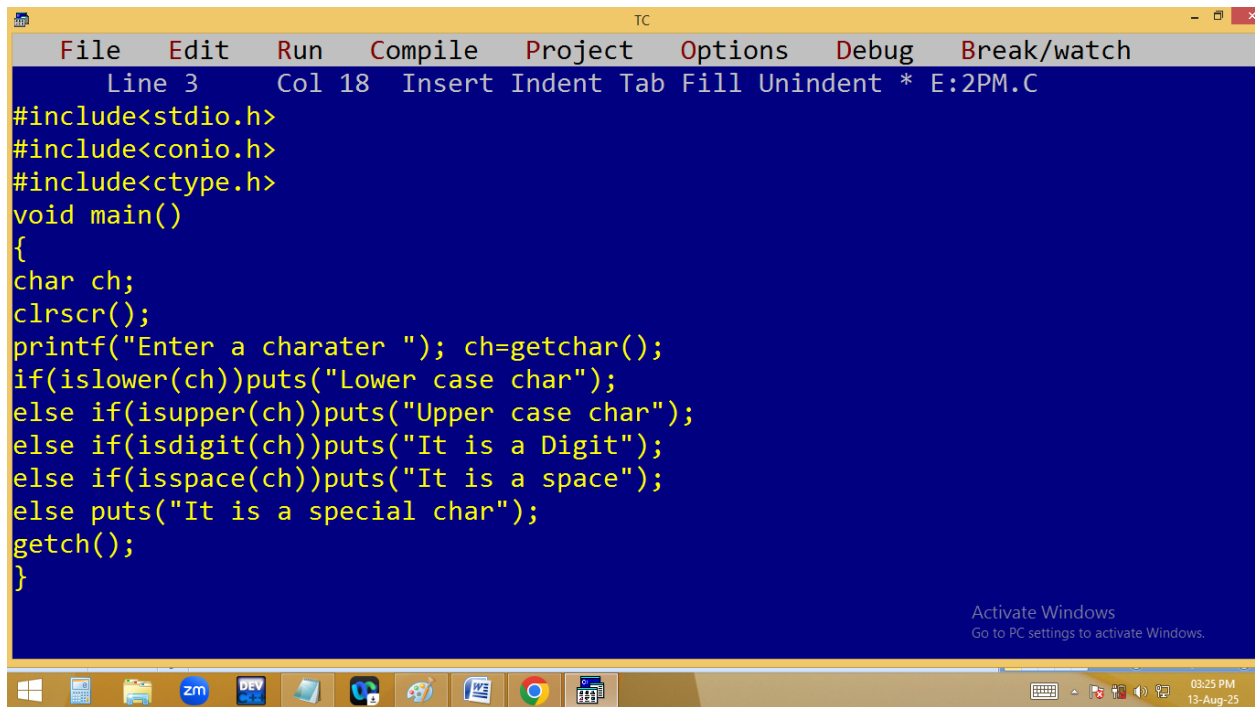
An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various application icons and the system clock set to 03:21 PM on 13-Aug-25.



This screenshot shows the same Turbo C++ IDE after the program has been executed. The output window, which is black, displays the text 'Enter a charater H' followed by 'Upper case char' on the next line, indicating that the user entered the character 'H' and the program correctly identified it as an uppercase character. The 'Activate Windows' watermark and the Windows taskbar are also visible in this view.



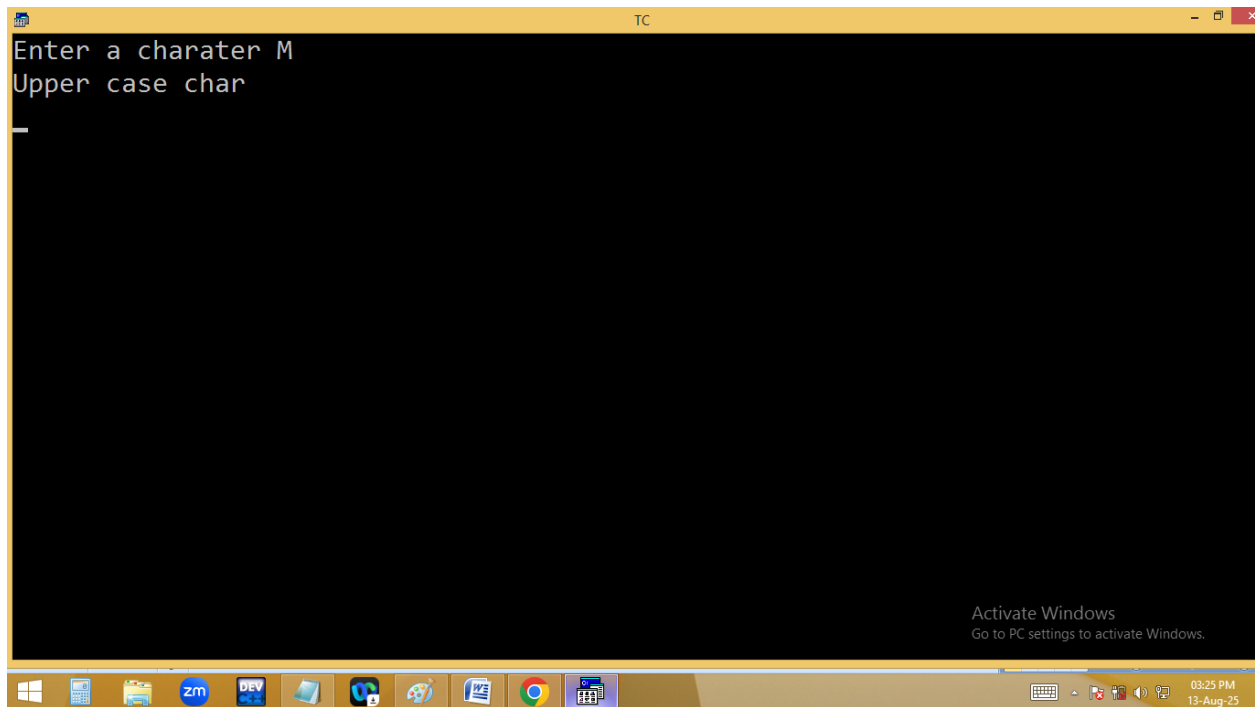
Using predefined functions?



The screenshot shows the Turbo C++ IDE with a yellow title bar and a menu bar containing File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates Line 3, Col 18, and the file name E:2PM.C. The main editing area has a blue background and contains the following C code:

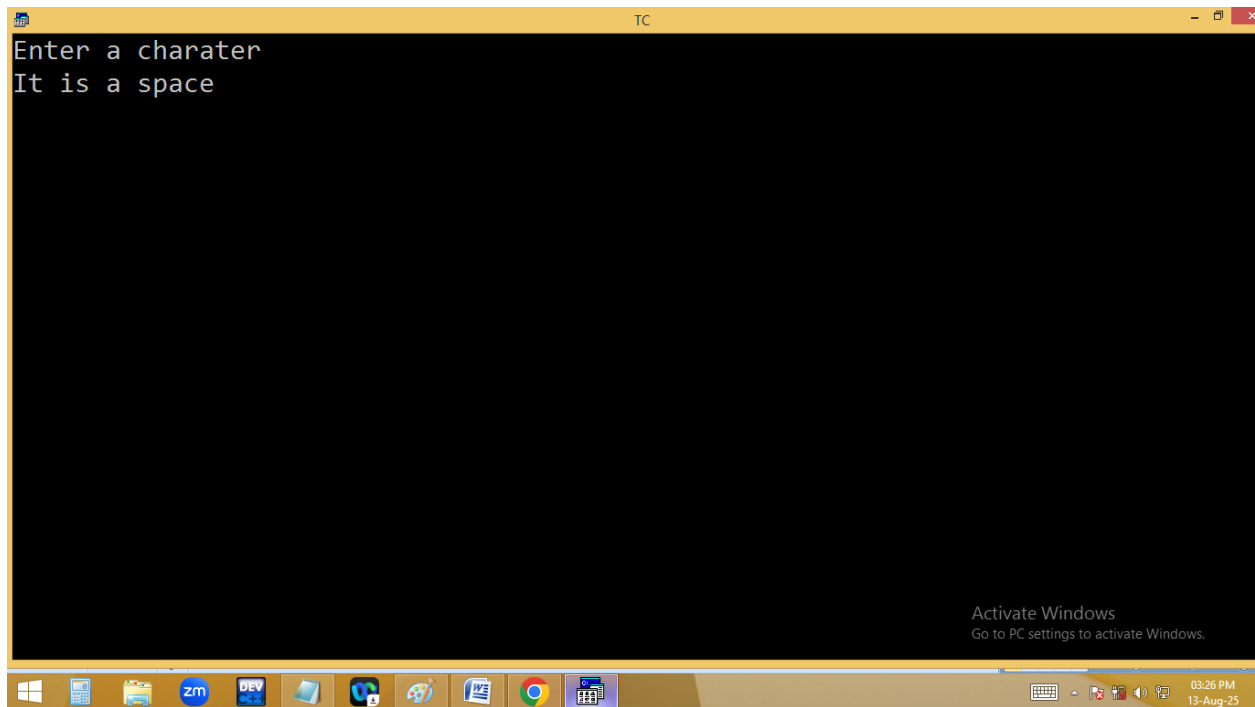
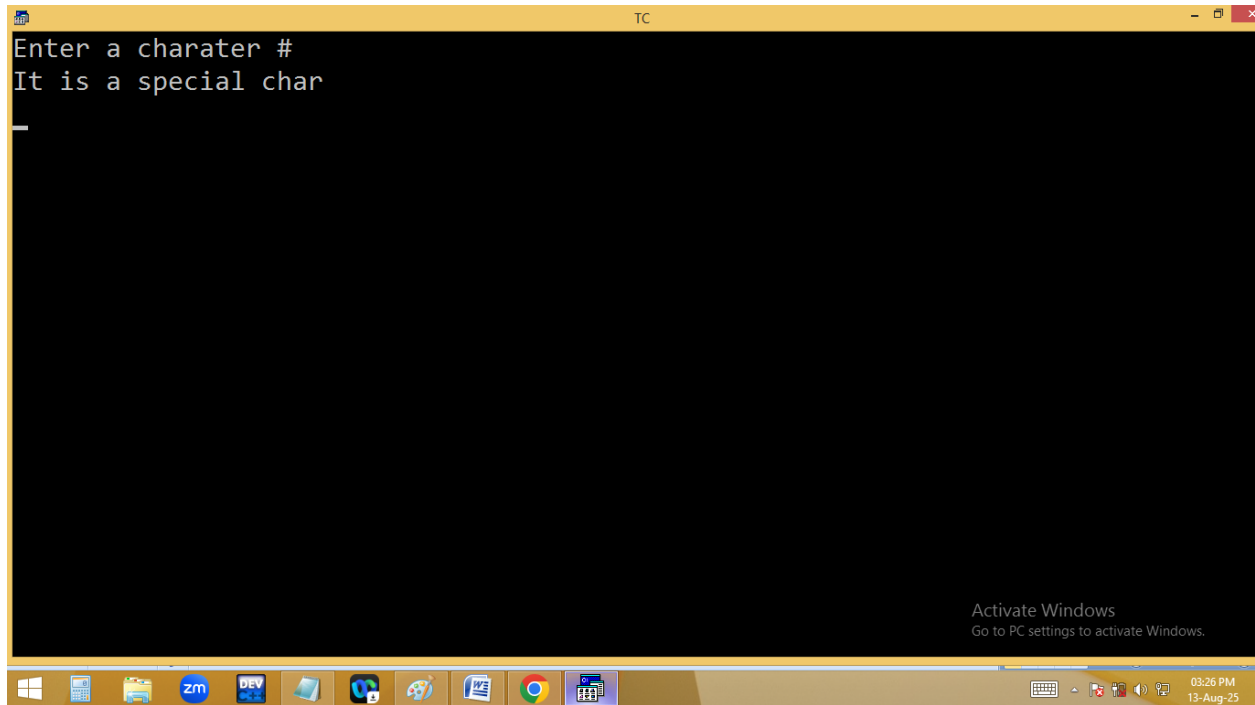
```
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); ch=getchar();
if(islower(ch))puts("Lower case char");
else if(isupper(ch))puts("Upper case char");
else if(isdigit(ch))puts("It is a Digit");
else if(isspace(ch))puts("It is a space");
else puts("It is a special char");
getch();
}
```

An "Activate Windows" watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various application icons and the system clock indicating 03:25 PM on 13-Aug-25.

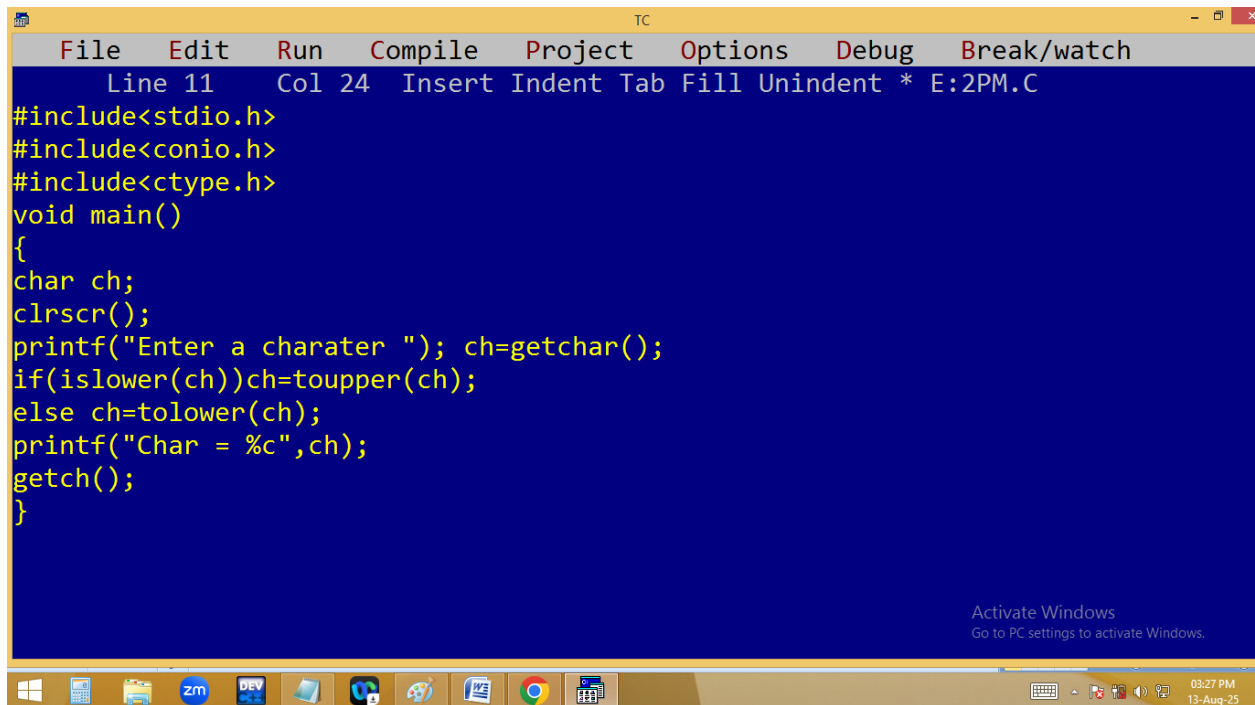


This screenshot shows the same Turbo C++ IDE after execution. The output window, which has a black background, displays the text "Enter a charater M" followed by "Upper case char" on the next line. The rest of the IDE interface, including the menu bar and taskbar, remains the same as in the first screenshot.





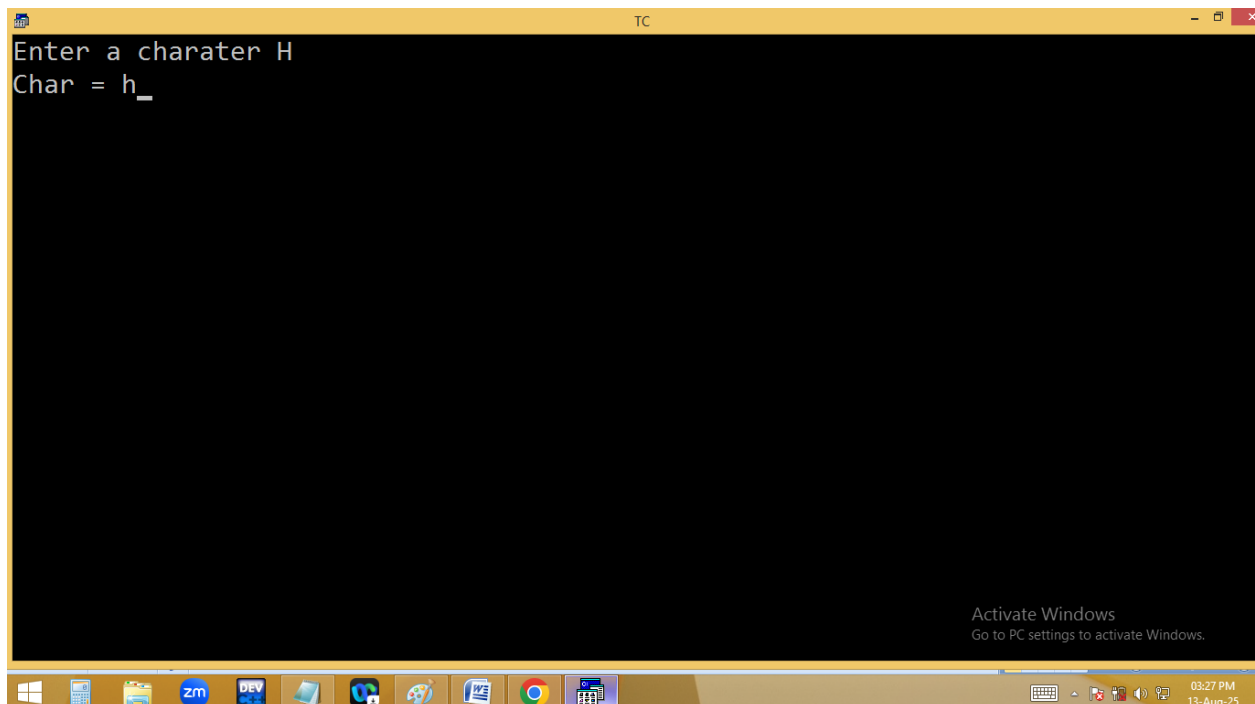
Lower to upper / upper to lower:



The screenshot shows the Turbo C++ IDE with the following code in E:2PM.C:

```
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 24 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); ch=getchar();
if(islower(ch))ch=toupper(ch);
else ch=tolower(ch);
printf("Char = %c",ch);
getch();
}
```

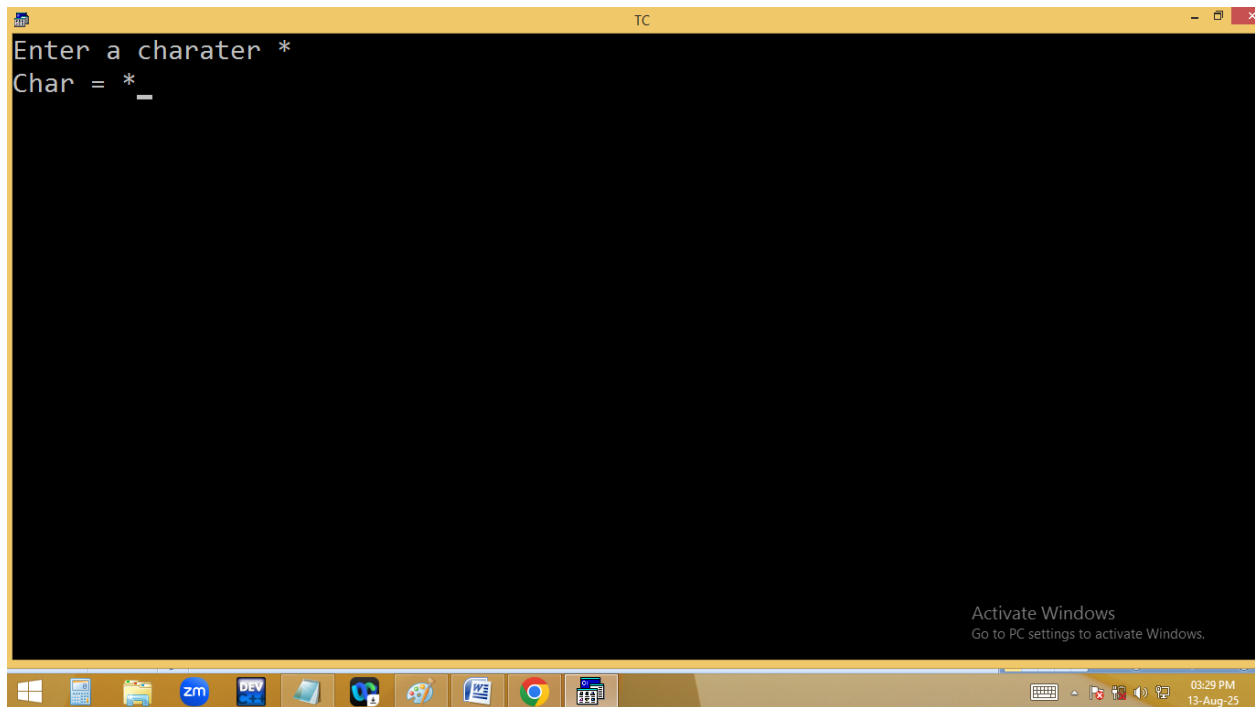
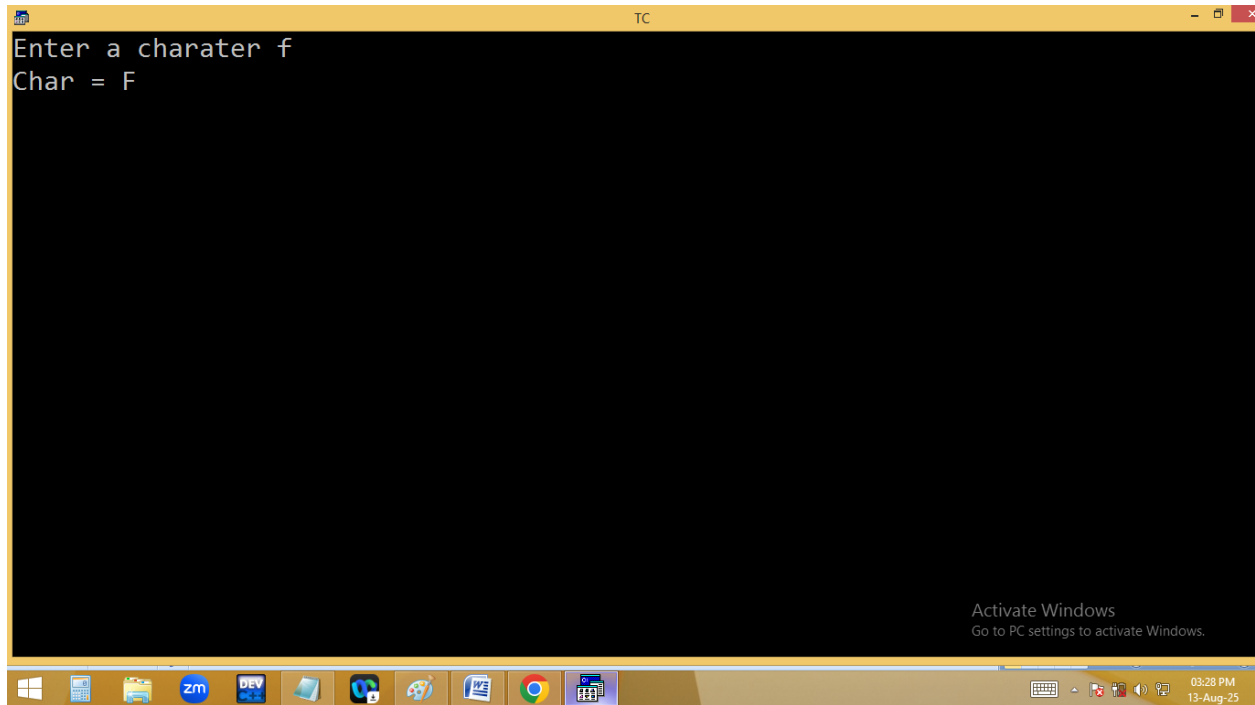
The Windows taskbar at the bottom shows the time as 03:27 PM on 13-Aug-25.

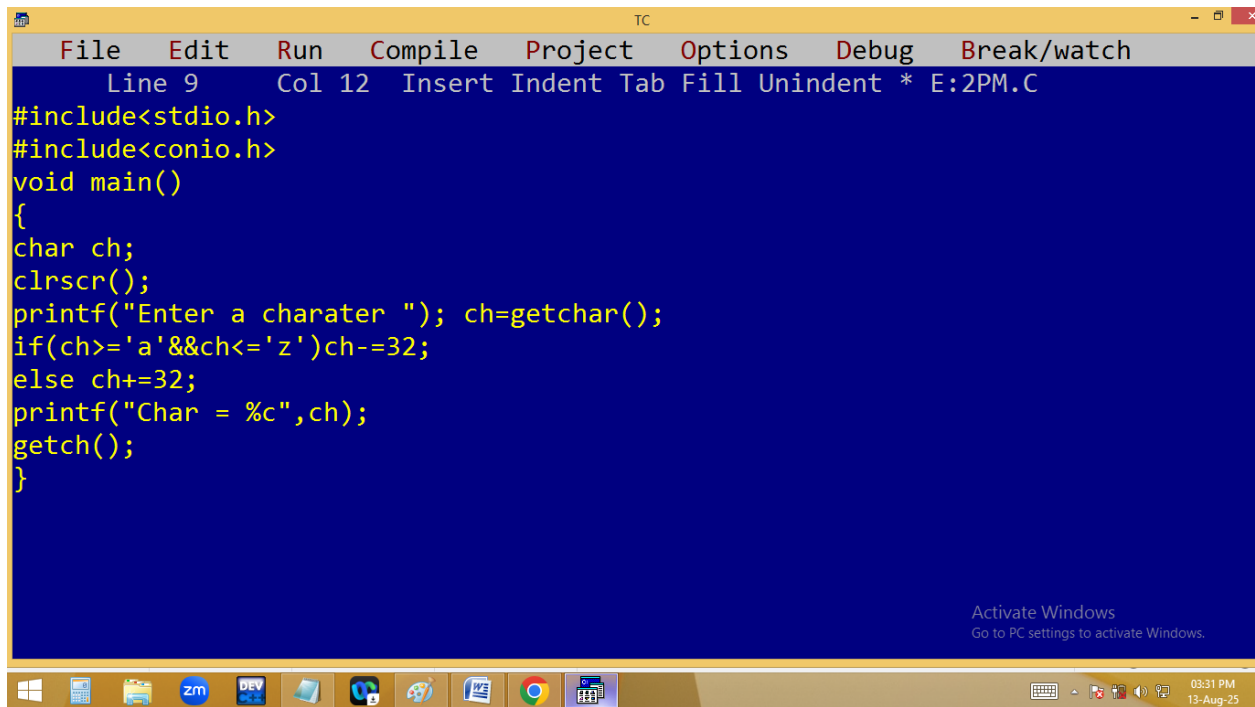


The screenshot shows the Turbo C++ IDE after execution. The output is:

```
Enter a charater H
Char = h_
```

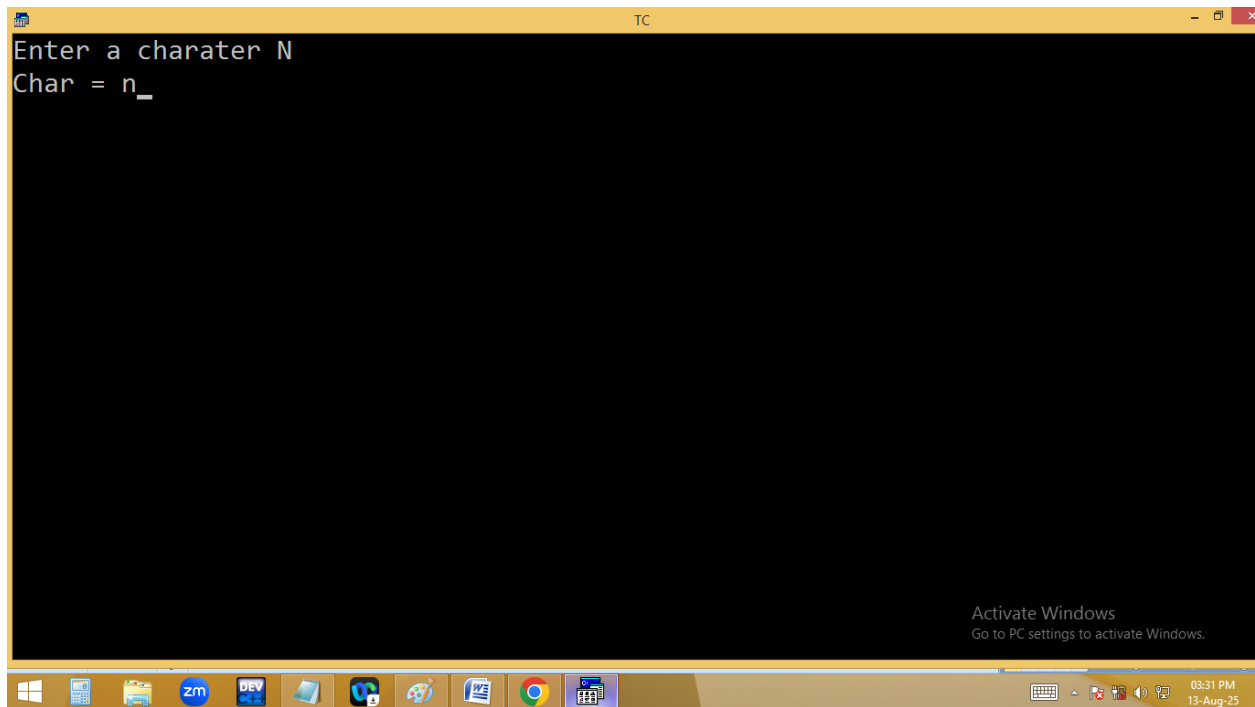
The Windows taskbar at the bottom shows the time as 03:27 PM on 13-Aug-25.





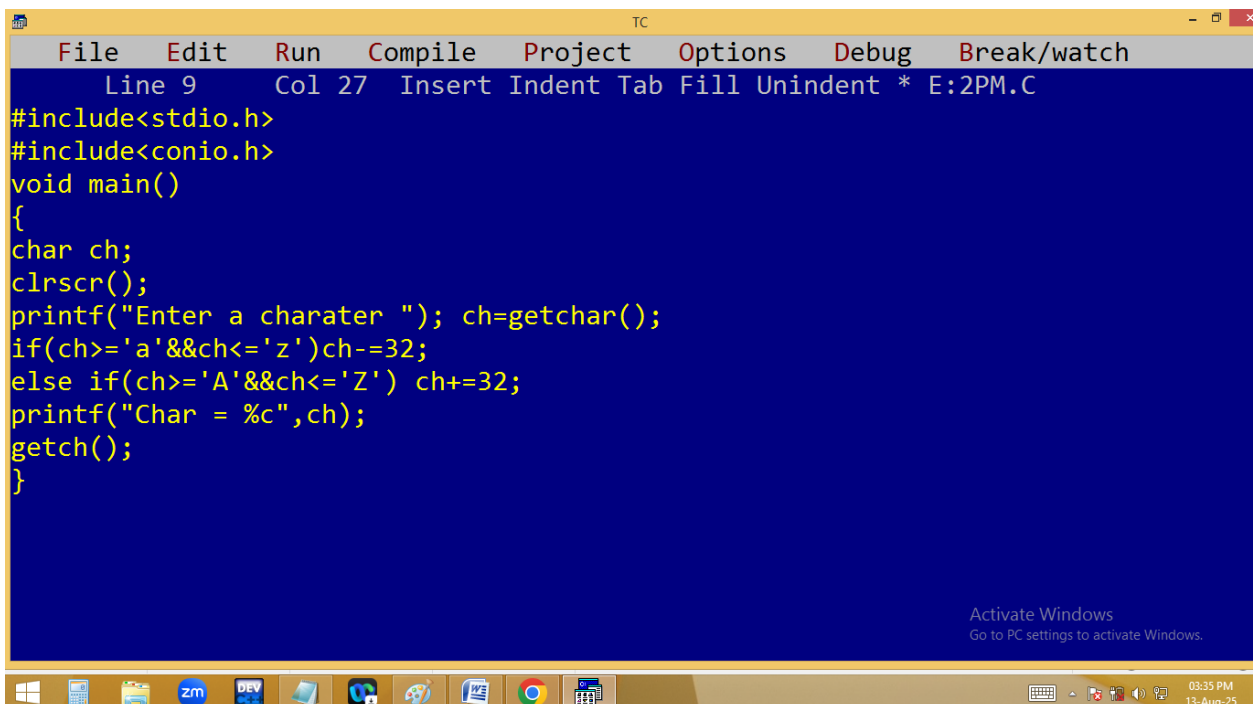
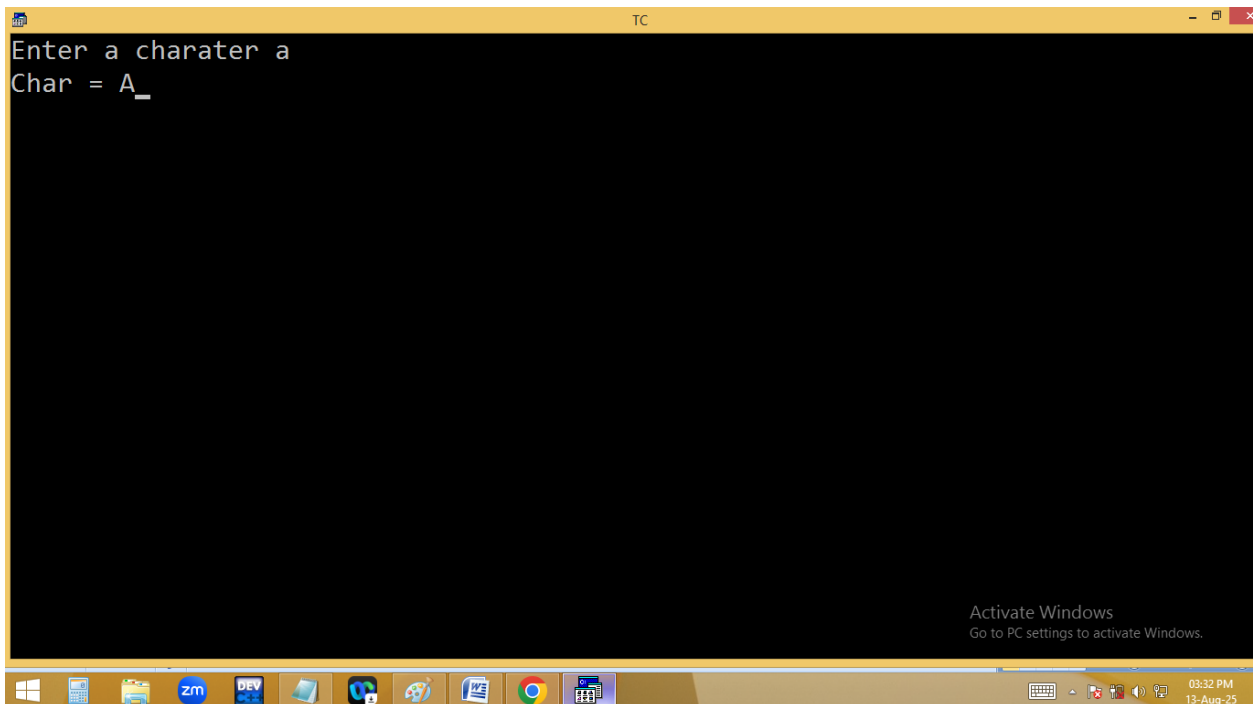
```
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 12 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); ch=getchar();
if(ch>='a'&&ch<='z')ch-=32;
else ch+=32;
printf("Char = %c",ch);
getch();
}
```

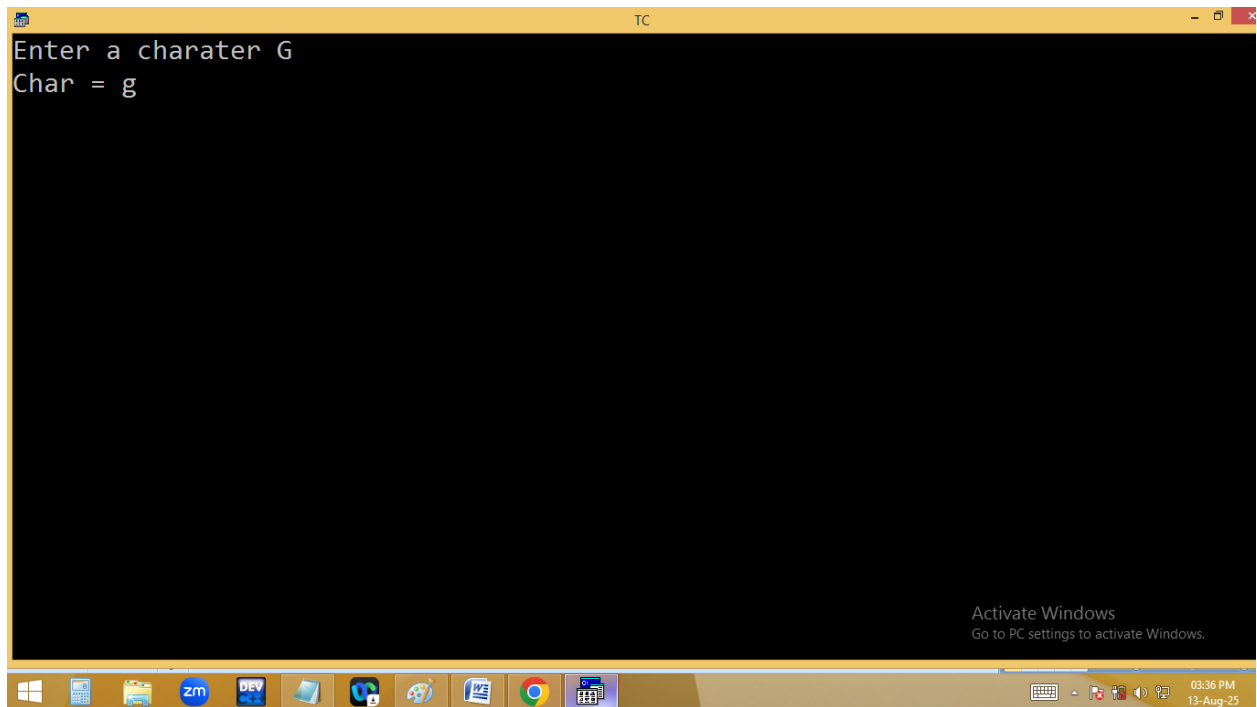
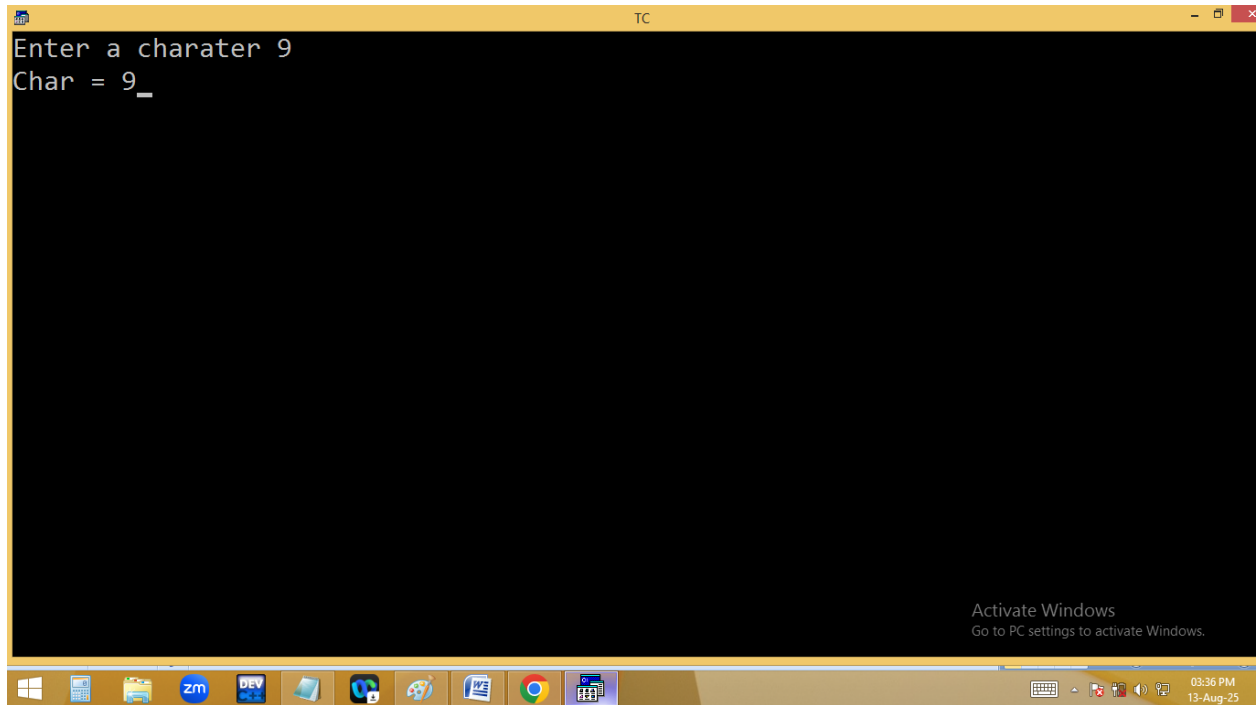
Activate Windows
Go to PC settings to activate Windows.

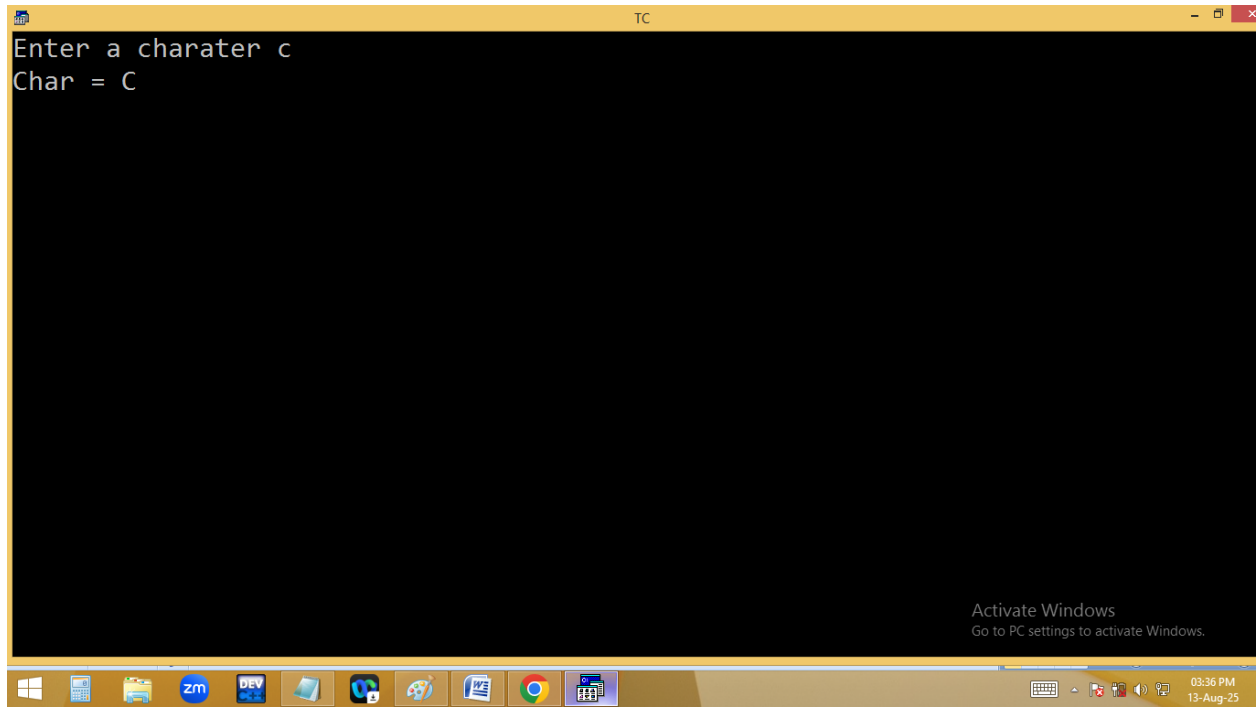


```
TC
Enter a charater N
Char = n_

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







```
TC
Enter a character 9
Char = 9
```

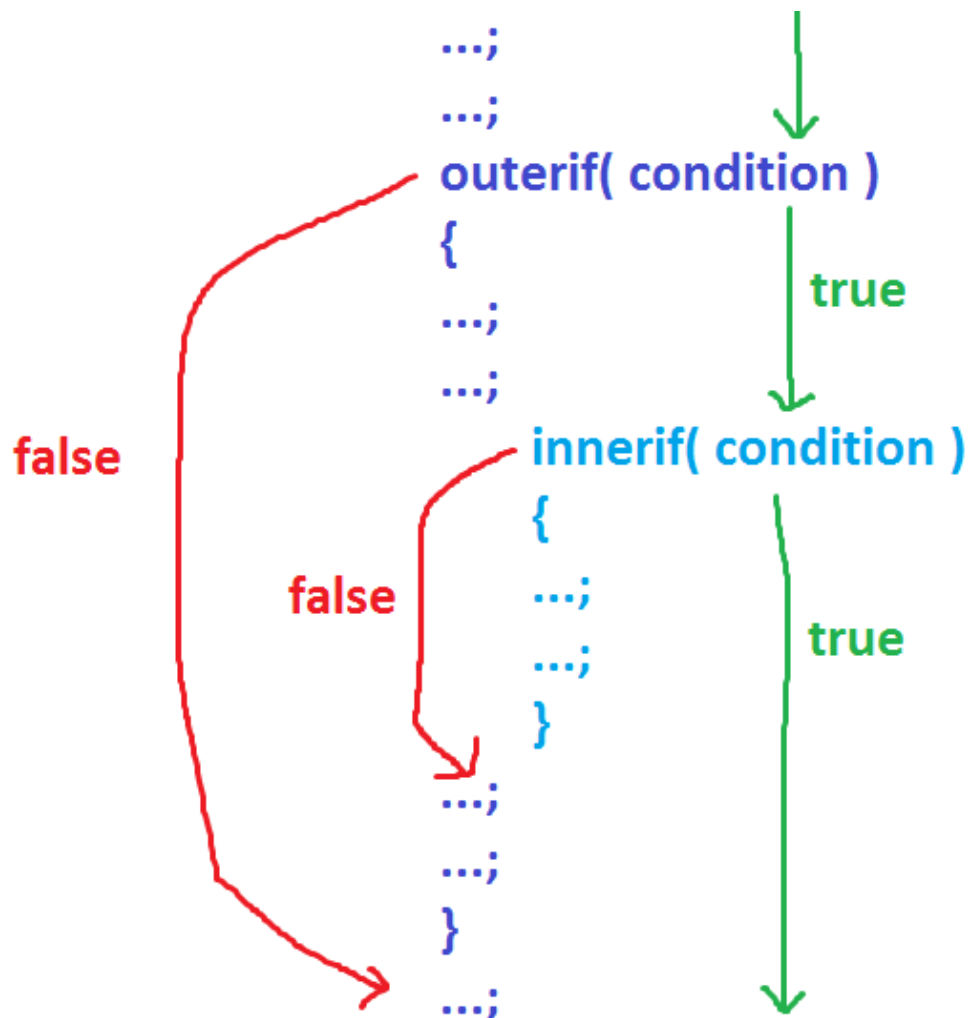
Activate Windows
Go to PC settings to activate Windows.

$$\begin{array}{r} * = 42 \\ 32 \\ \hline 74 - J \end{array}$$

$$\begin{array}{r} a = 57 \\ 32 \\ \hline 89 - Y \end{array}$$

$$\begin{array}{r} \text{ch} \\ a = 97 \\ - 32 \\ \hline A = 65 \\ + 32 \\ \hline a = 97 \end{array}$$

Nested if: If within if is called nested if.



Read a stu id, name, 6 sub marks. Find tot, avg and grade based on below avg using nested if.

Avg	Grade
≥ 80	Distinction
≥ 60	1 st

>=50	2nd
>=35	3rd class
<35	Fail

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int id, tel,eng,hin,mat,sci,soc,tot,pass=0;char name[20];float avg;clrscr();
printf("Enter stu id, name, 6 sub marks ");
scanf("%d%s%d%d%d%d%d",&id,name,&tel,&eng,&hin,&mat,&sci,&soc);
tot=tel+eng+hin+mat+sci+soc; avg=tot/6.0;
printf("%s id=%d, Tot=%d, Avg=%.2f, Grade=",name,id,tot,avg);
if(tel>=35&&eng>=35&&hin>=35&&mat>=35&&sci>=35&&soc>=35)
{
if(avg>=80)puts("Distinction");
else if(avg>=60)puts("1st class");
else if(avg>=50)puts("2nd class");
else puts("3rd class");
}
else puts("Failed");
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.

```
TC
Enter stu id, name, 6 sub marks 3 vijay 44 54 35 44 54 40
vijay id=3, Tot=271, Avg=45.17, Grade=3rd class
```

Activate Windows
Go to PC settings to activate Windows.

Page: 9 of 10 | Words: 181

Home work:

1. Read a person age and gender and determine that person is eligible for marriage or not?

2. Read a bank customer acno, name, opening bal.

Take user choice.

1. Deposit

2. Withdrawl

3. Balance

3. Read Irctc User id, Pass word, Captcha and check it out they are valid input or not. If valid inputs entered u r program have to display welcome to irctc.

If user name wrong → Invalid user

If pass word wrong → invalid pass word

If captcha wrong → invalid captcha

