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 → 50*1.45 + 30*2.8= 156.5

180 → 50*1.45 + 50*2.8 + 80*3.05= 456.5

280 →50*1.45 + 50*2.8 + 100*3.05 + 80*4.75=897.5

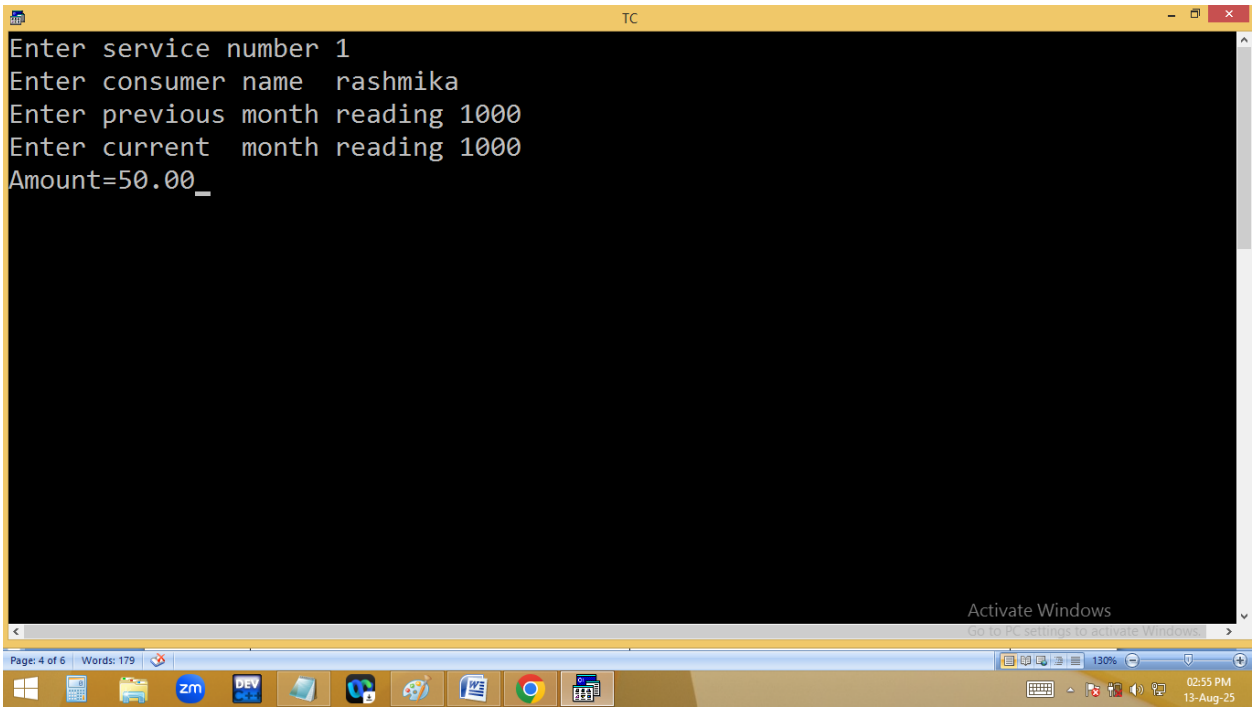
637 ➔

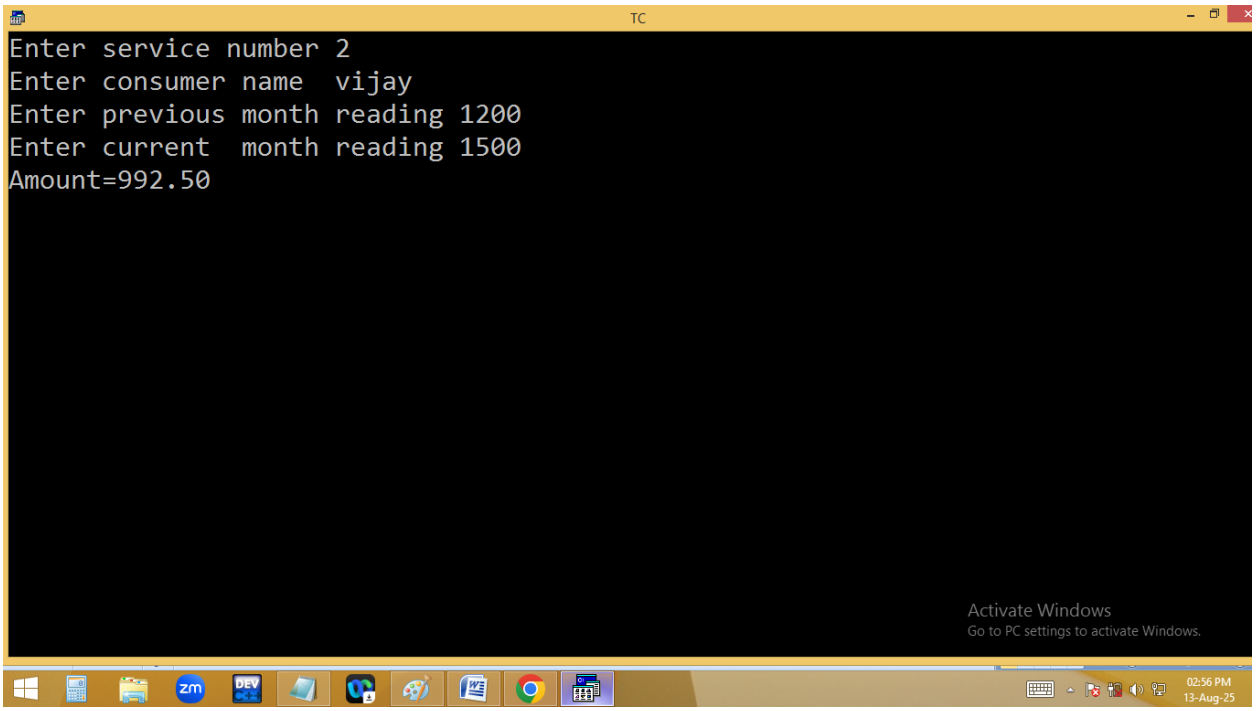
50*1.45+50*2.8+100*3.05+100*4.75+200*6+137*6.25=3048.75

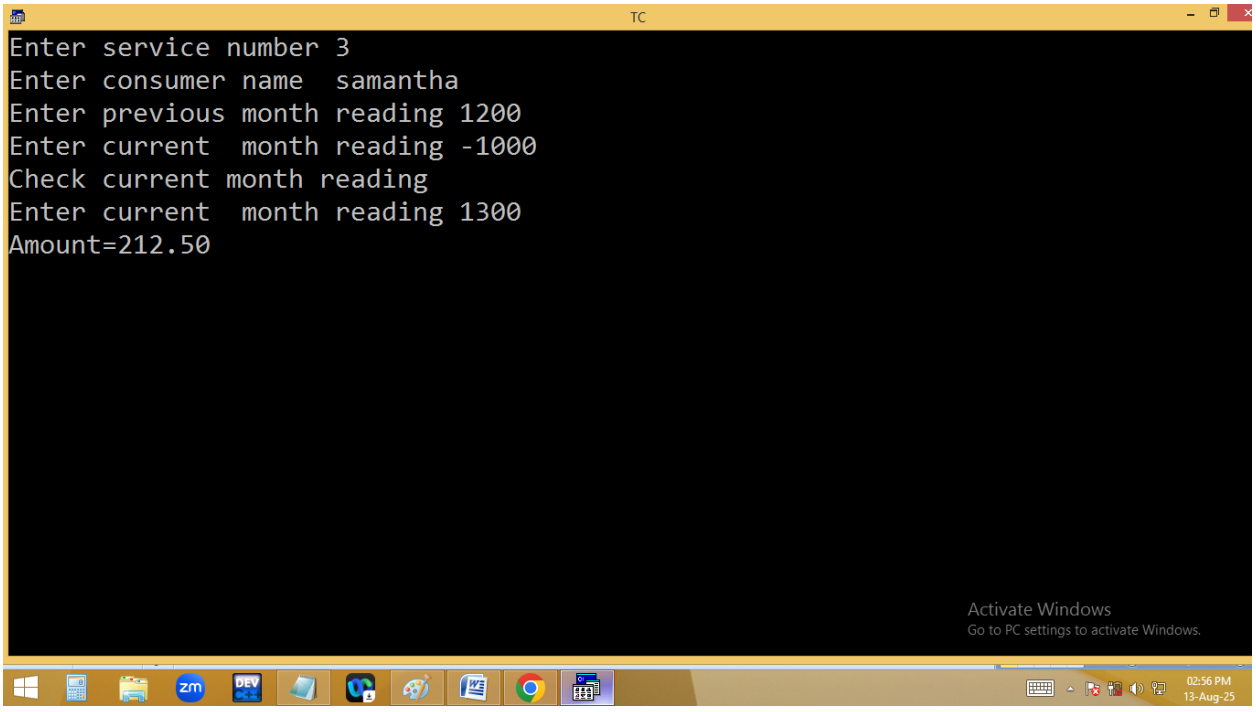
```
#include<stdio.h>
#include<conio.h>
void main()
{
long serno,pre,cur,units;

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();
}
```

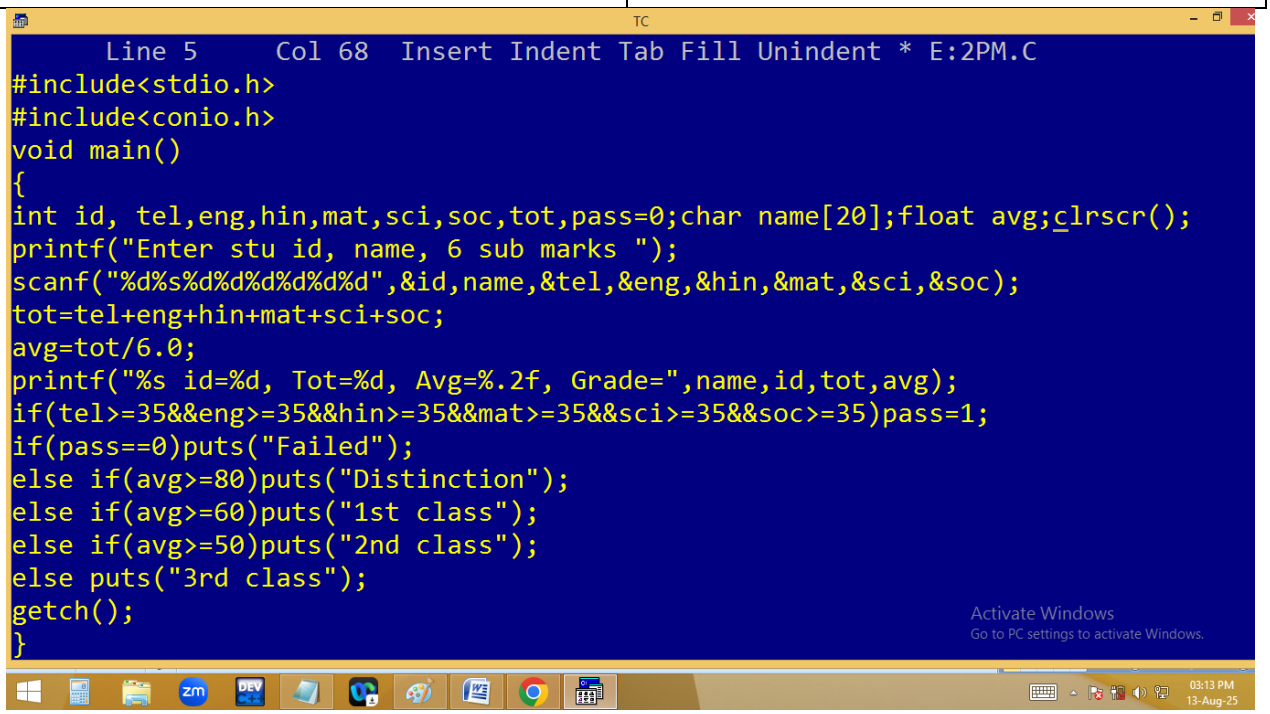


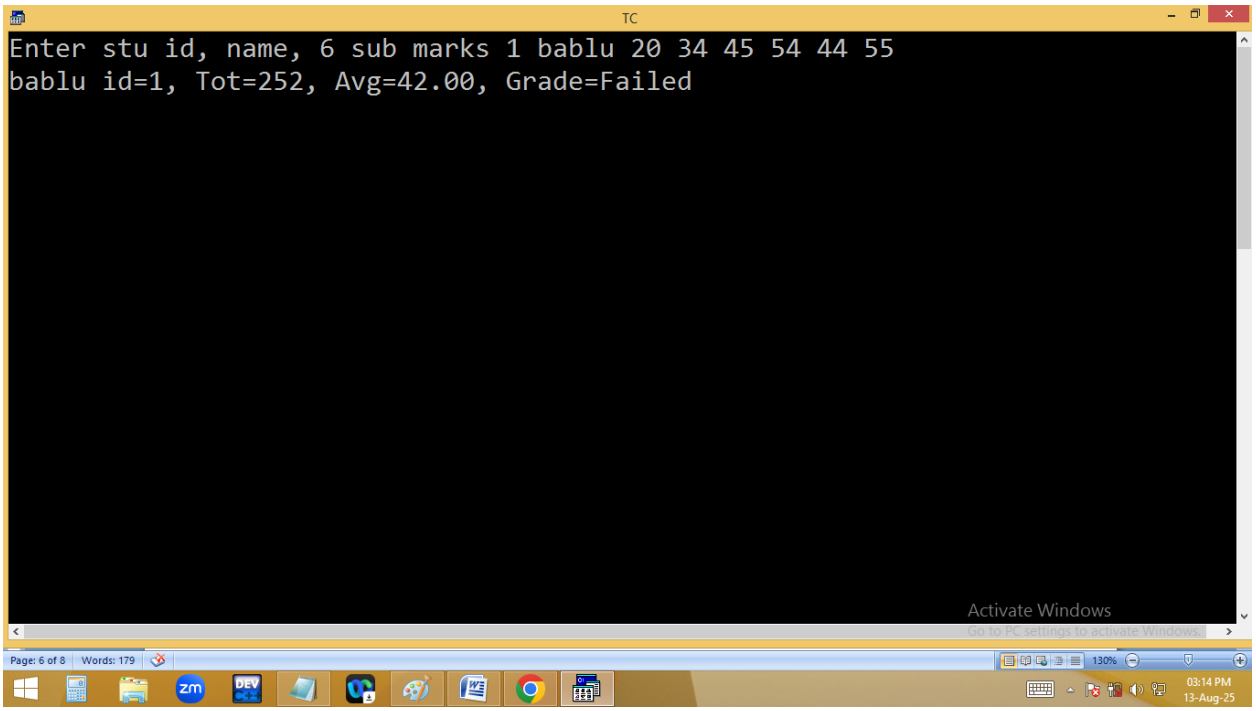


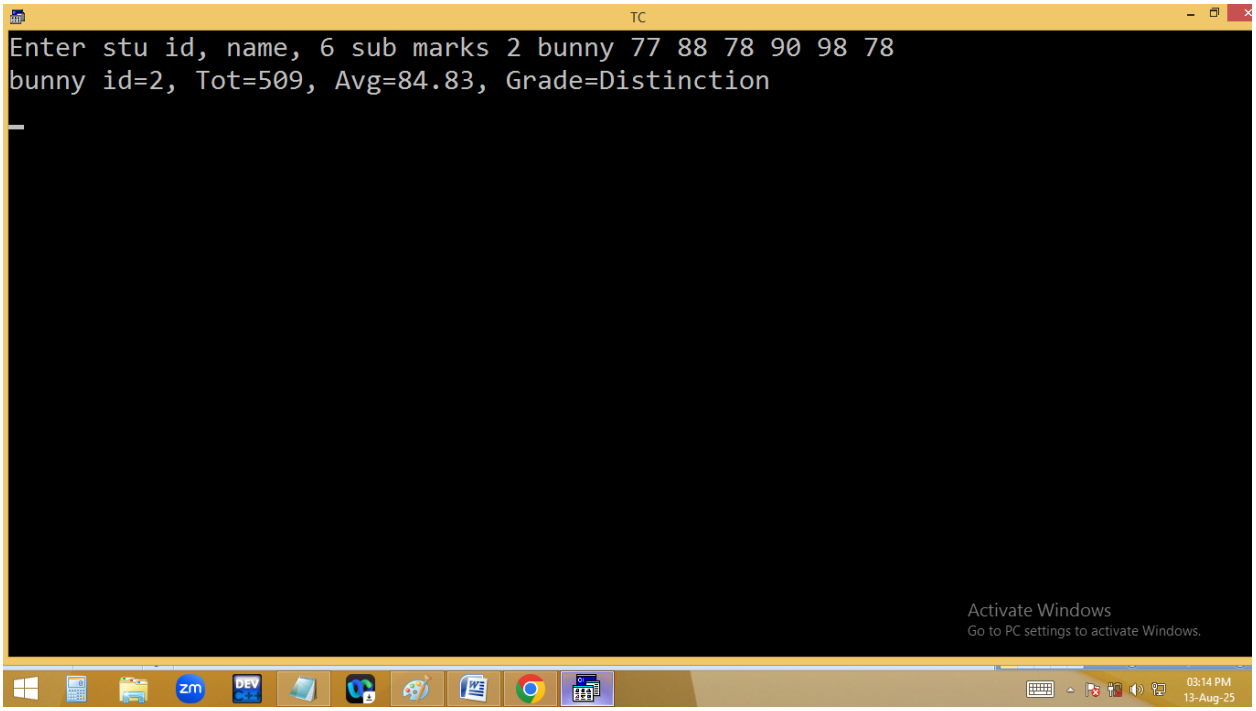


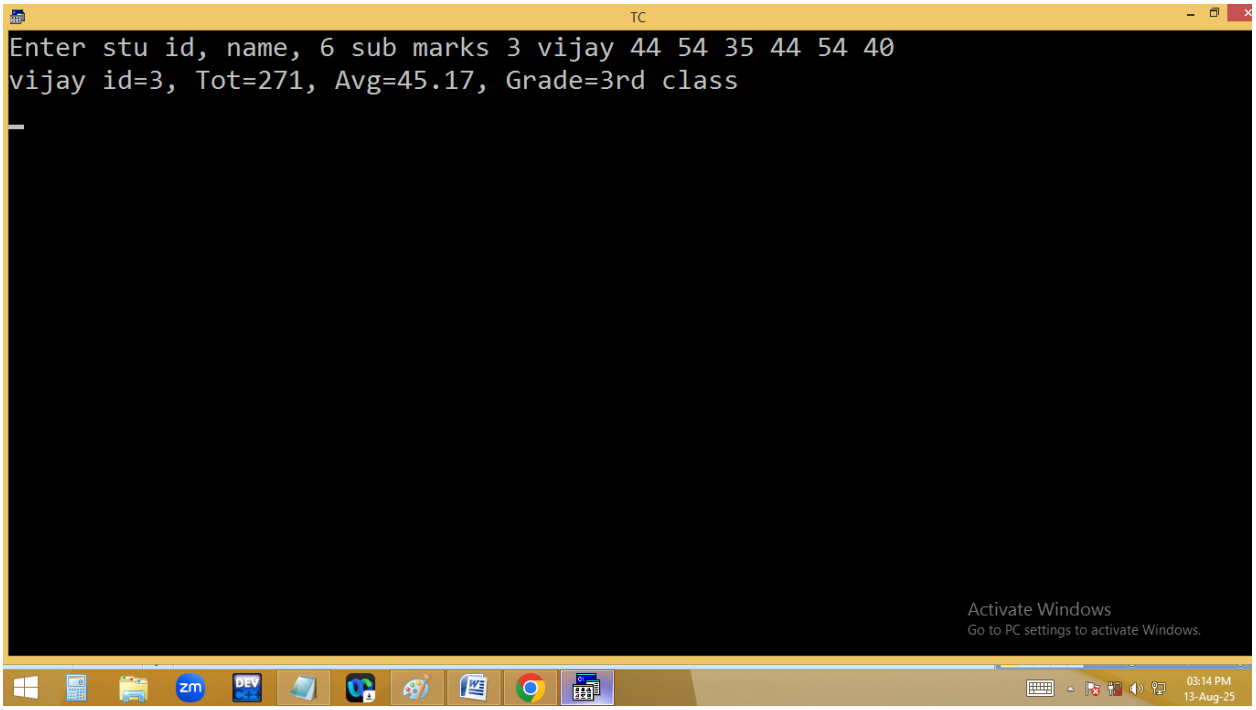
Read a stu id, name, 6 sub marks. Find tot, avg and grade based on below avg.

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

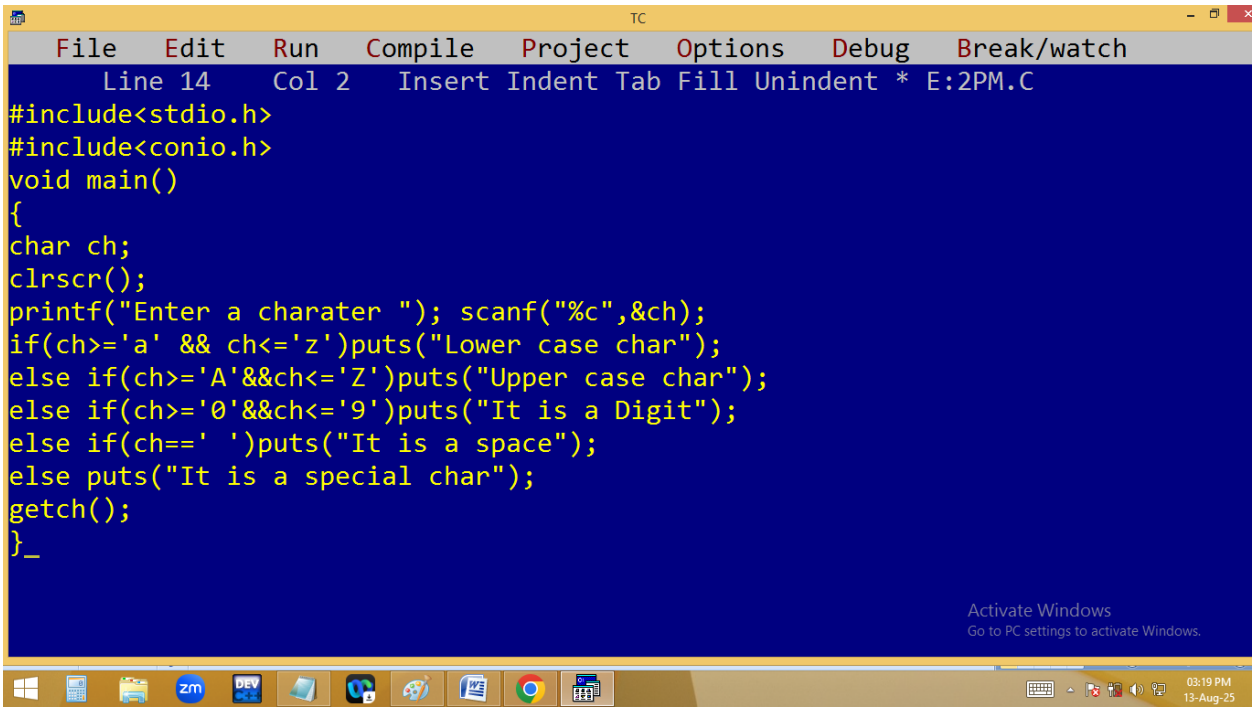


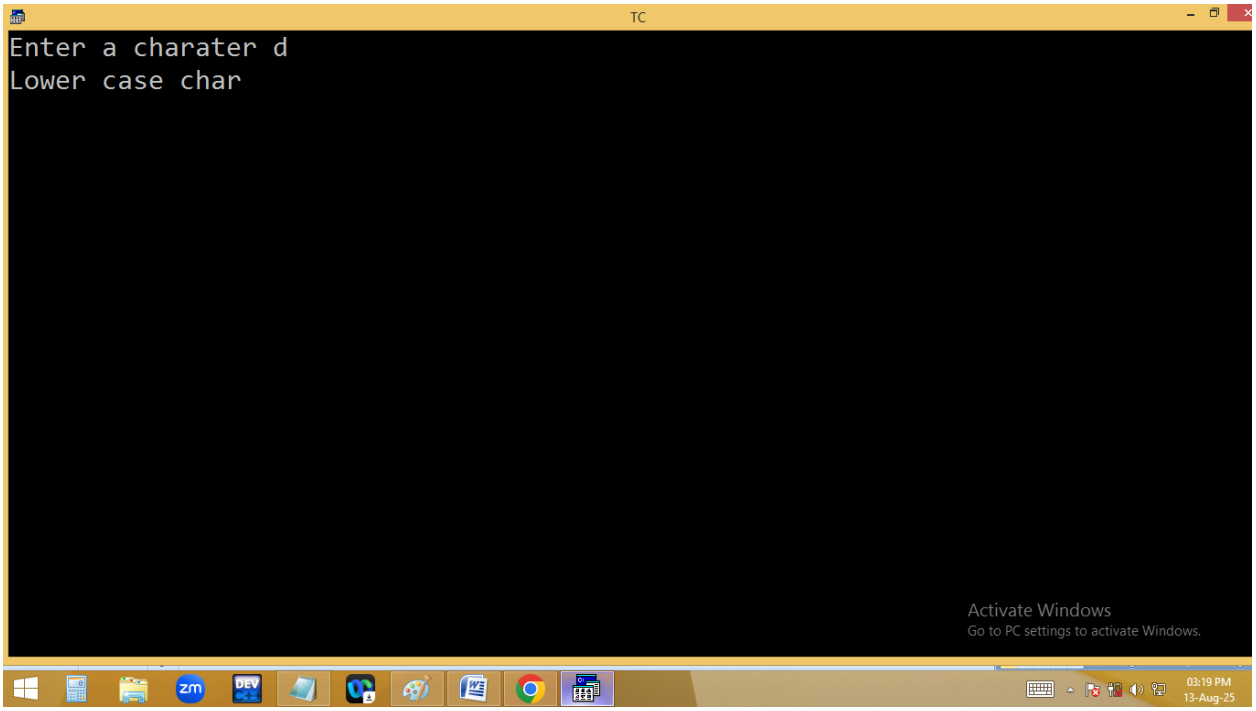

TC
Enter stu id, name, 6 sub marks 1 bablu 20 34 45 54 44 55
bablu id=1, Tot=252, Avg=42.00, Grade=Failed
Activate Windows
Go to PC settings to activate Windows.
Page: 6 of 8
Words: 179
130%
03:14 PM
13-Aug-25

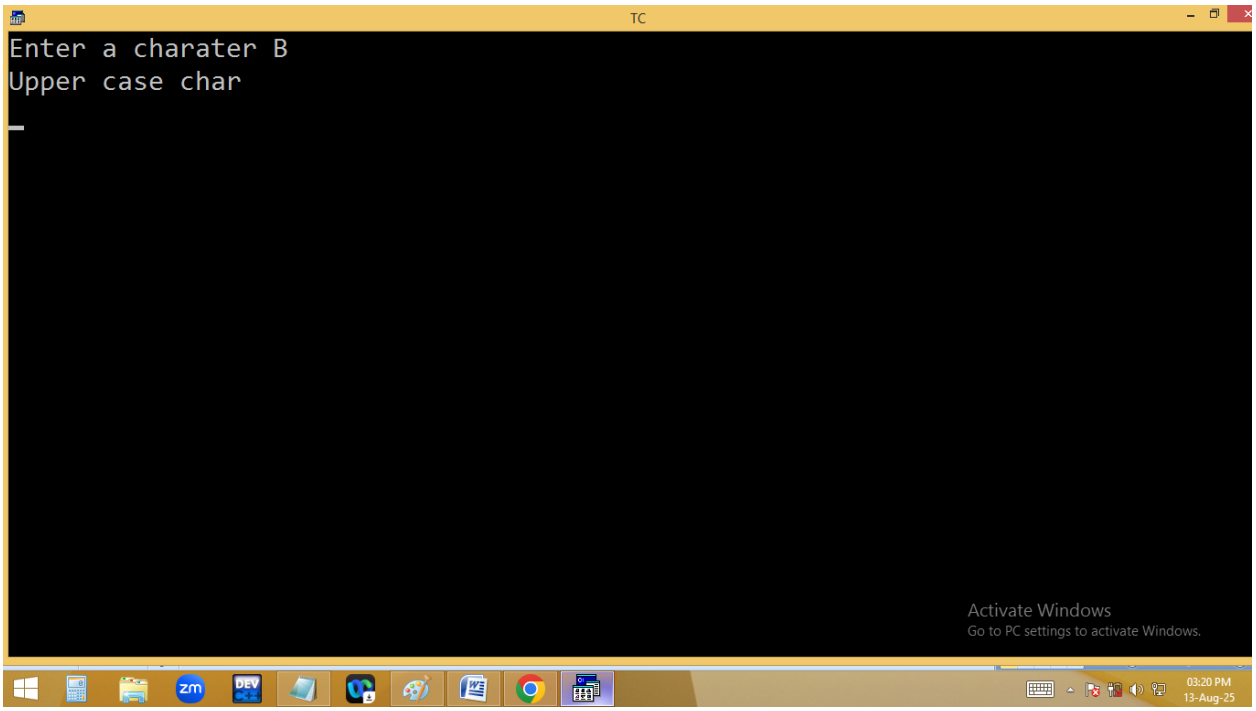

TC
Enter stu id, name, 6 sub marks 2 bunny 77 88 78 90 98 78
bunny id=2, Tot=509, Avg=84.83, Grade=Distinction
Activate Windows
Go to PC settings to activate Windows.
03:14 PM
13-Aug-25

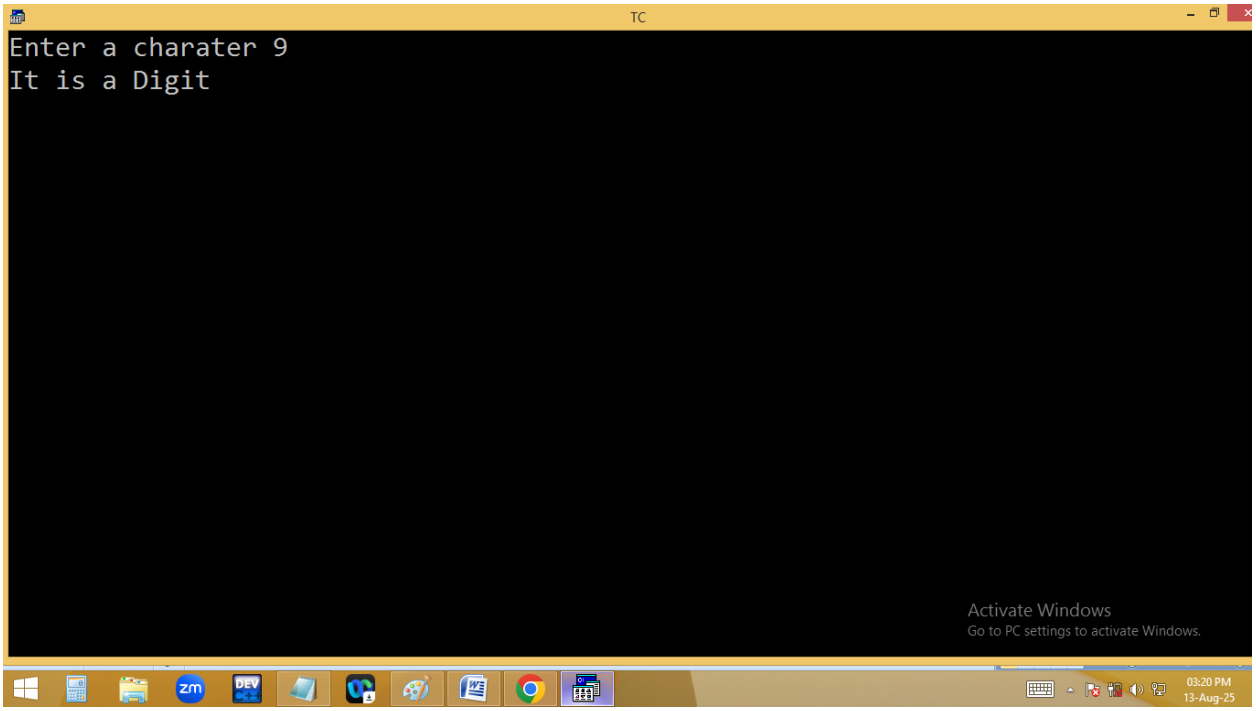


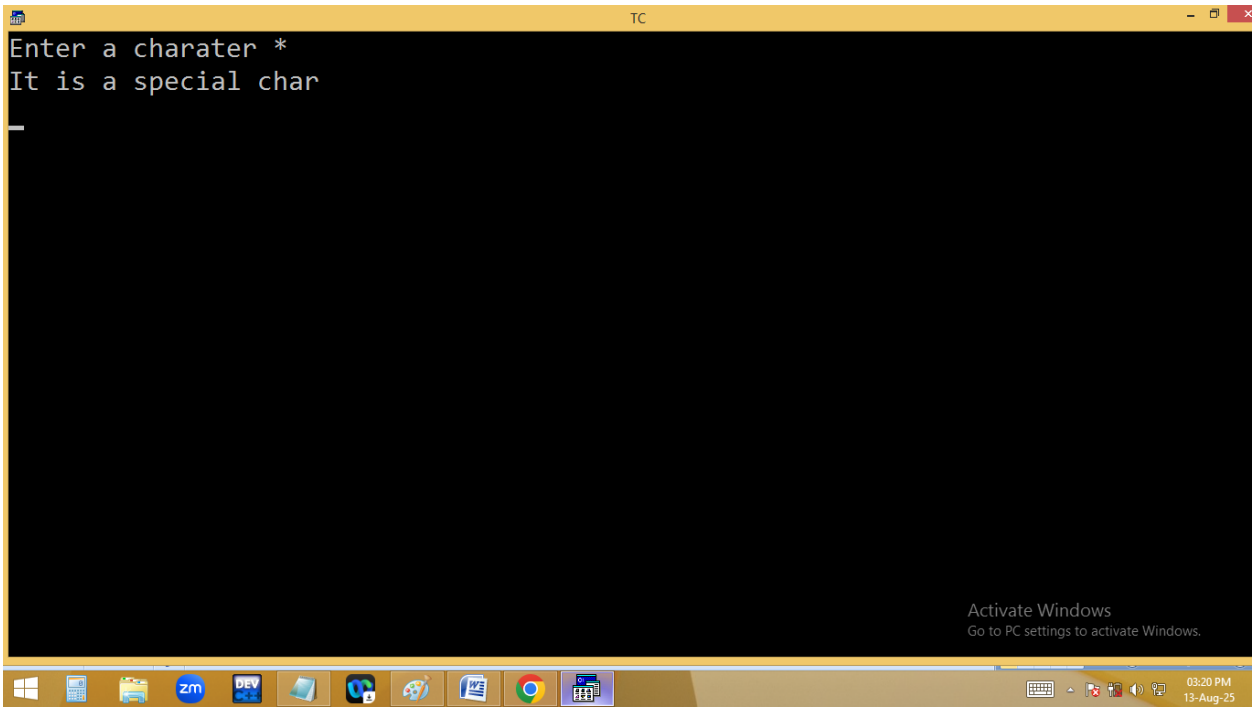
Read a character and find out it is lower / upper / digit / space / special char.

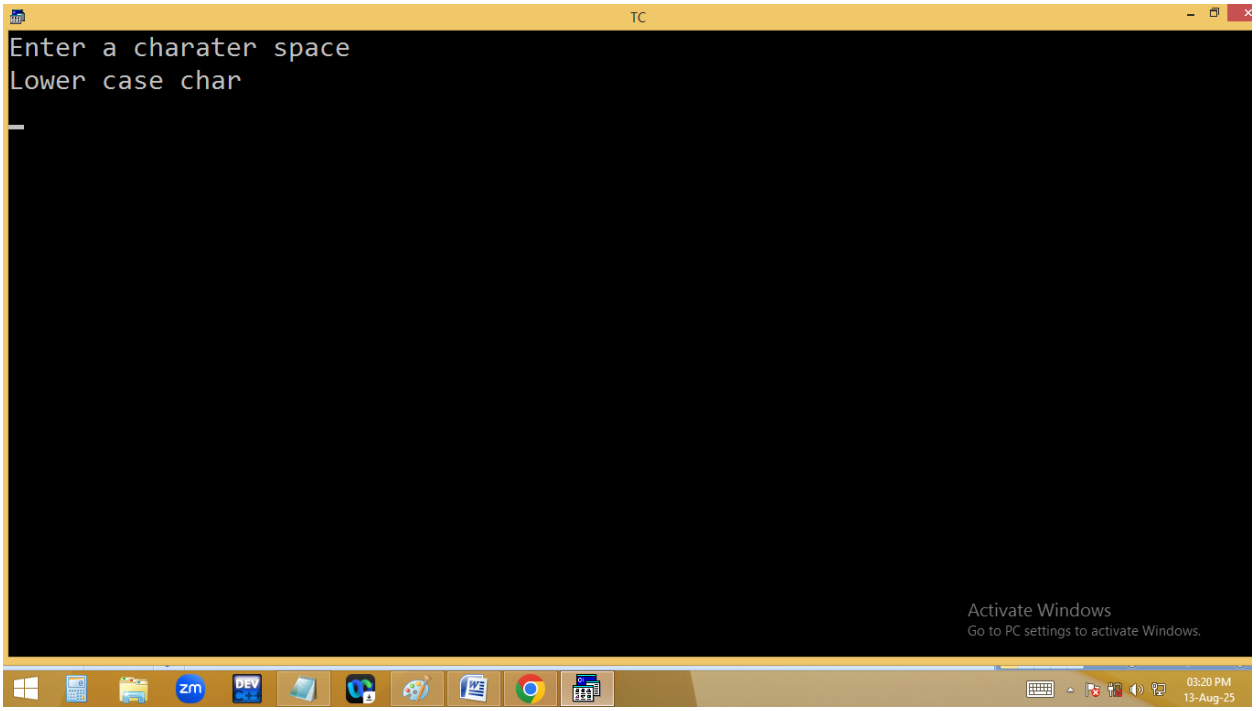

TC
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 2 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); scanf("%c",&ch);
if(ch>='a' && ch<='z')puts("Lower case char");
else if(ch>='A'&&ch<='Z')puts("Upper 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();
}_
Activate Windows
Go to PC settings to activate Windows.
03:19 PM
13-Aug-25

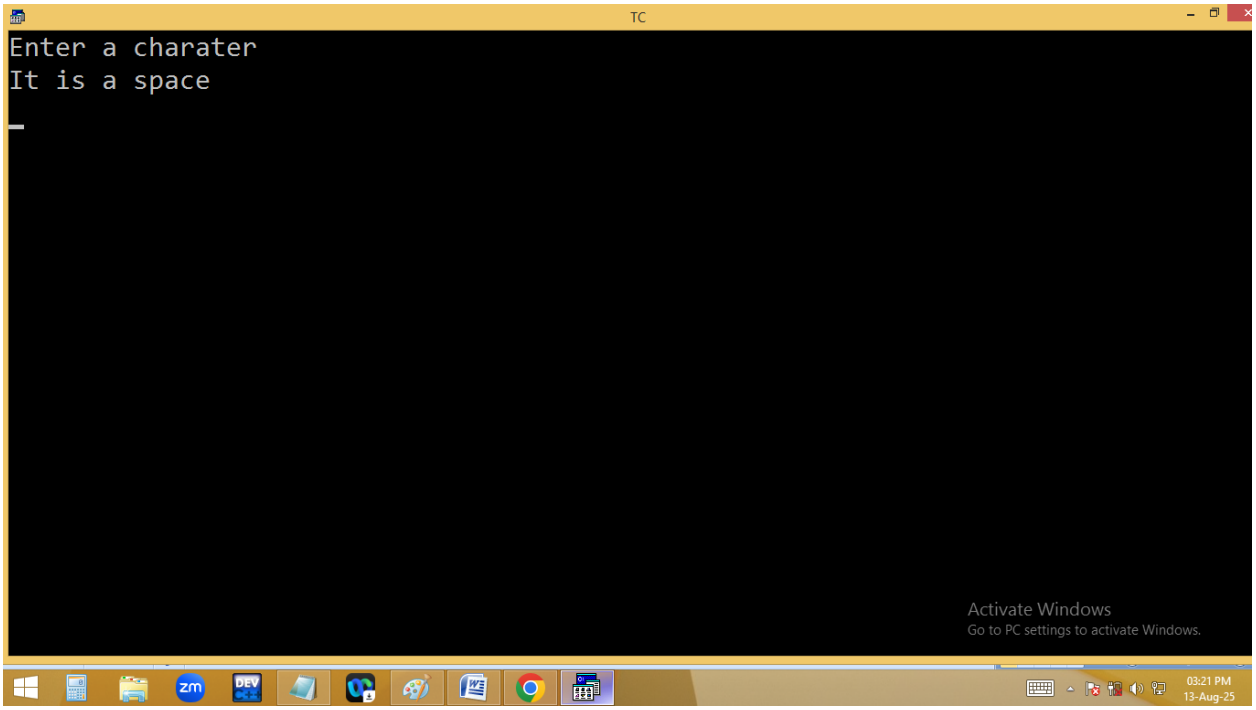

TC
Enter a charater d
Lower case char
Activate Windows
Go to PC settings to activate Windows.
03:19 PM
13-Aug-25


TC
Enter a charater B
Upper case char
Activate Windows
Go to PC settings to activate Windows.
03:20 PM
13-Aug-25

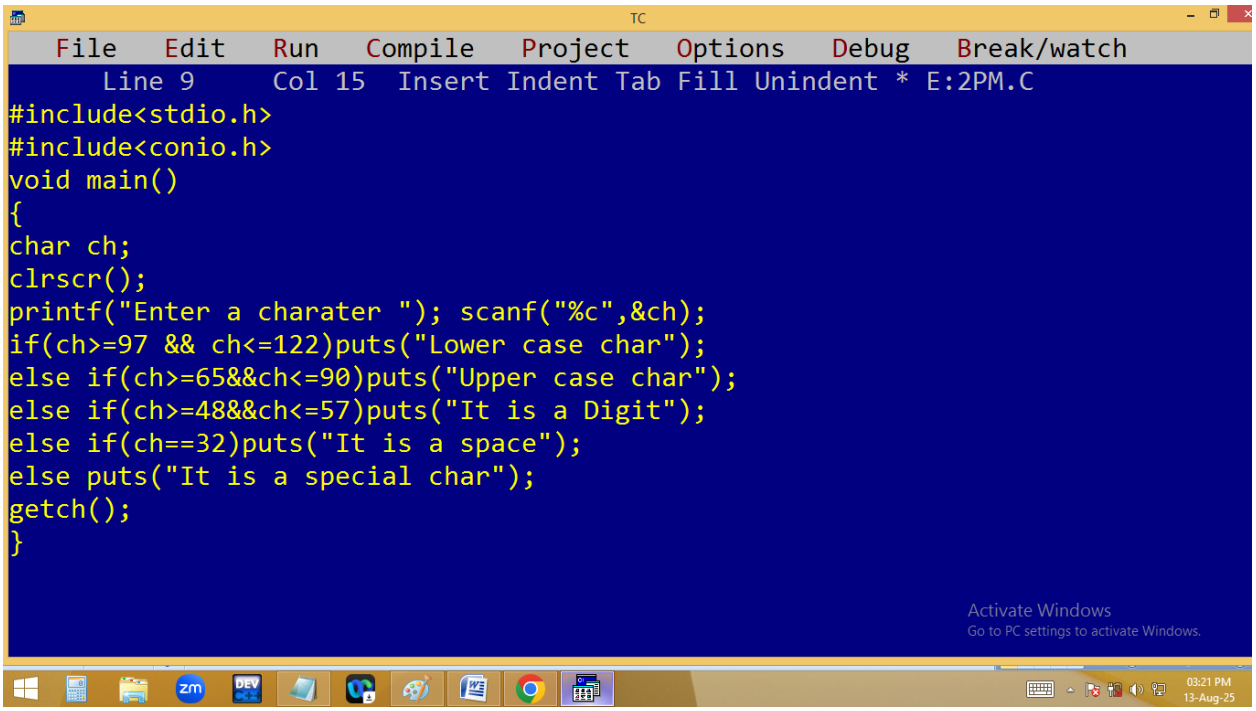

TC
Enter a charater 9
It is a Digit
Activate Windows
Go to PC settings to activate Windows.
03:20 PM
13-Aug-25

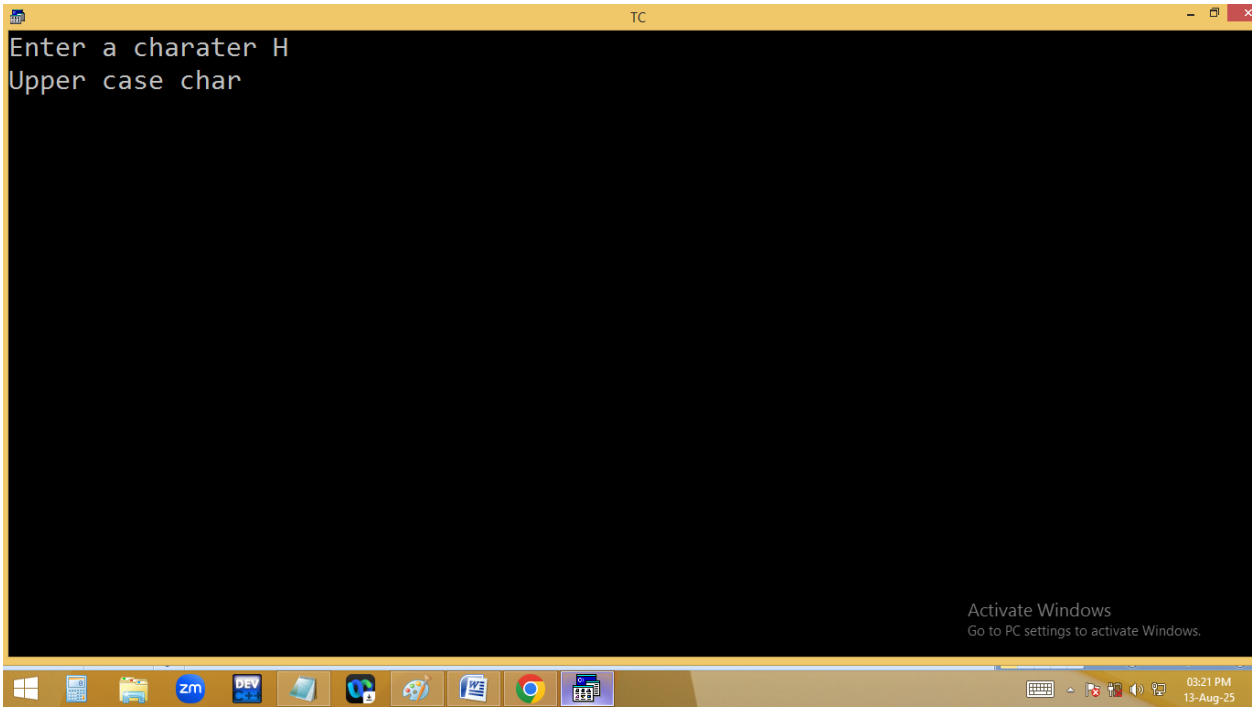

TC
Enter a charater *
It is a special char
Activate Windows
Go to PC settings to activate Windows.
03:20 PM
13-Aug-25

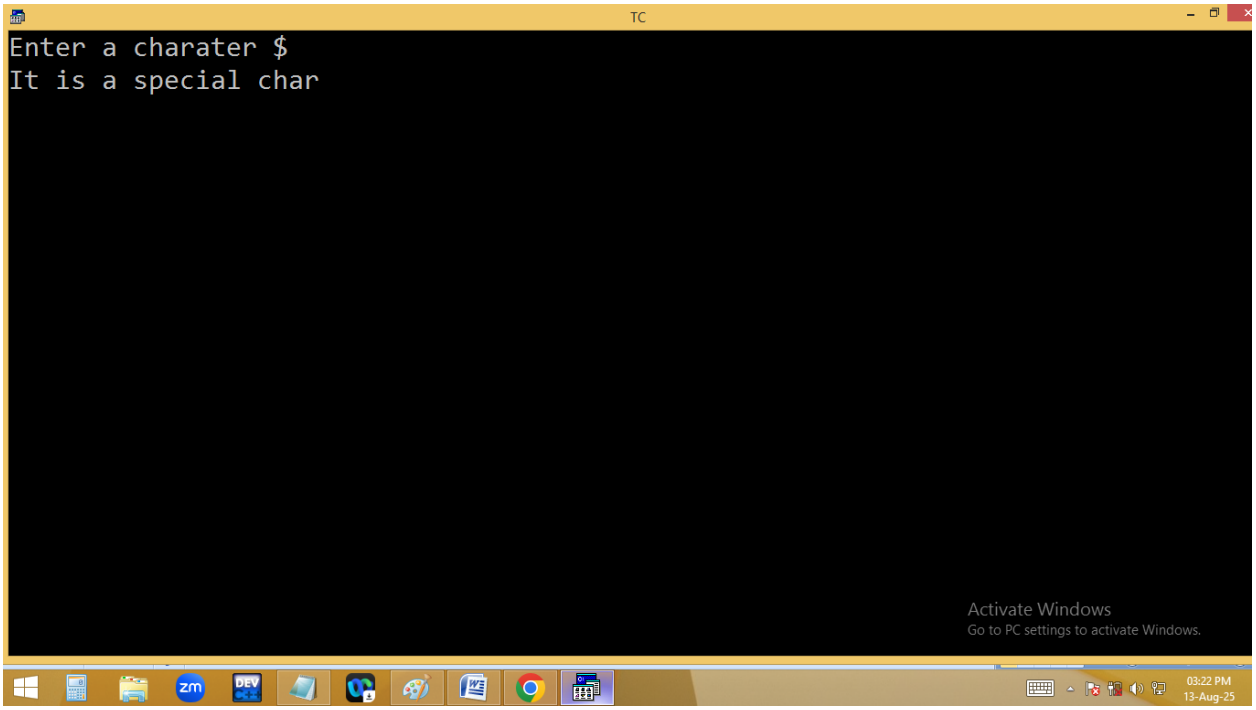

TC
Enter a charater space
Lower case char
Activate Windows
Go to PC settings to activate Windows.
03:20 PM
13-Aug-25



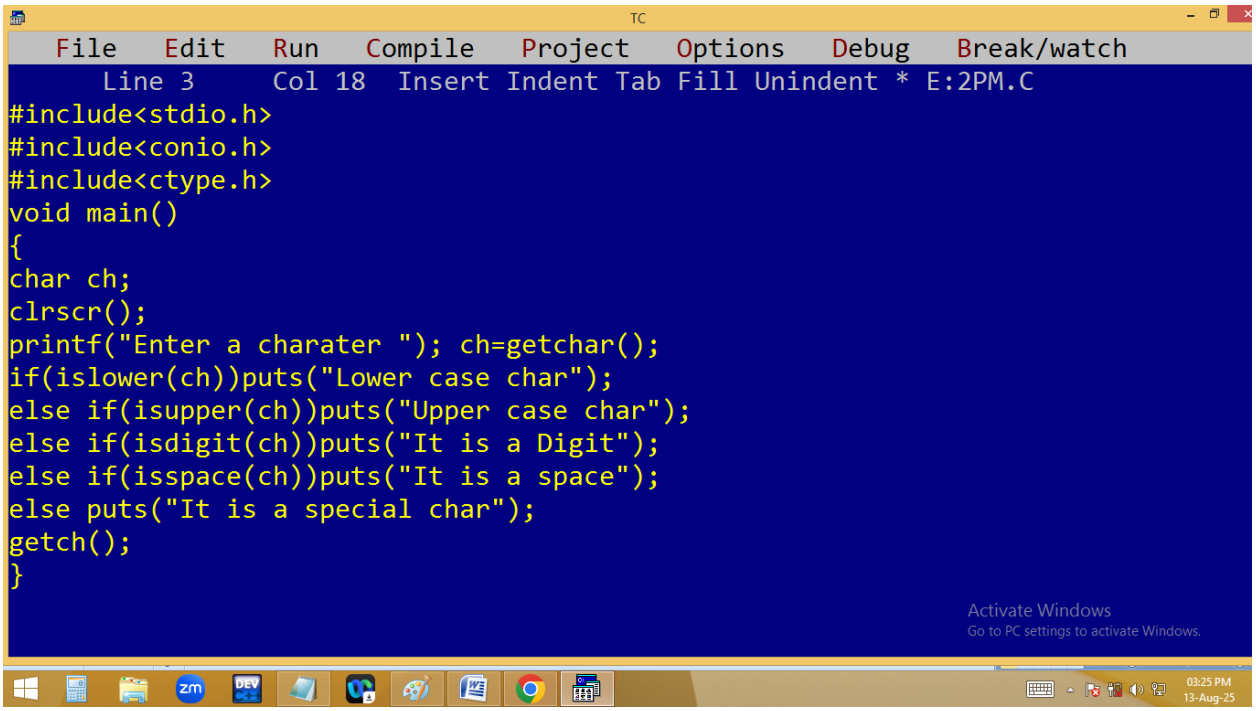
Using ascii values:

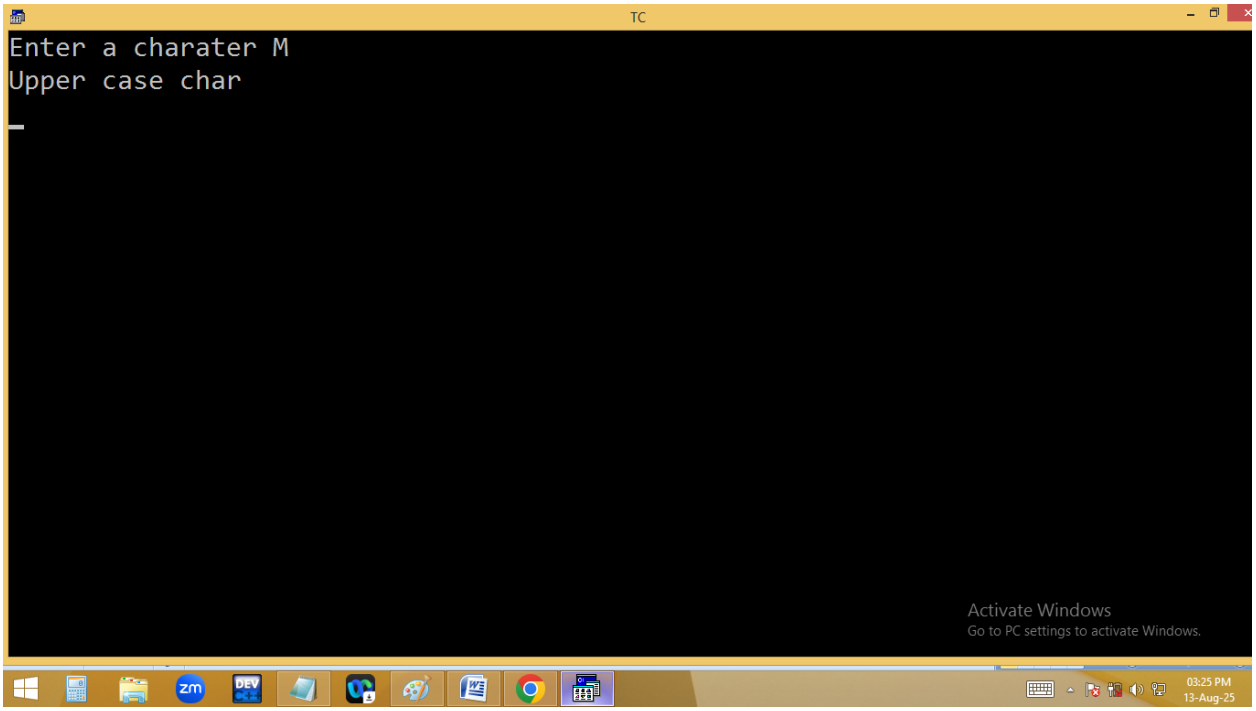

TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 15 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); scanf("%c",&ch);
if(ch>=97 && ch<=122)puts("Lower case char");
else if(ch>=65&&ch<=90)puts("Upper 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();
}
Activate Windows
Go to PC settings to activate Windows.
03:21 PM
13-Aug-25

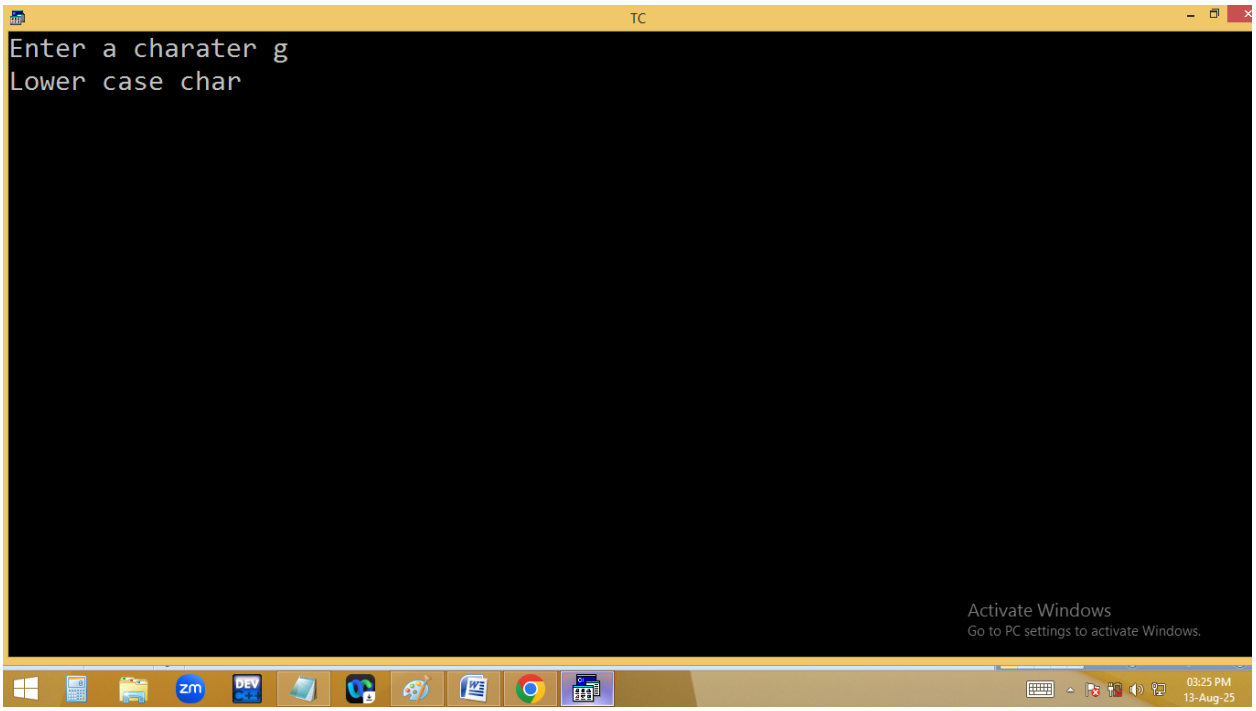

TC
Enter a charater H
Upper case char
Activate Windows
Go to PC settings to activate Windows.
03:21 PM
13-Aug-25

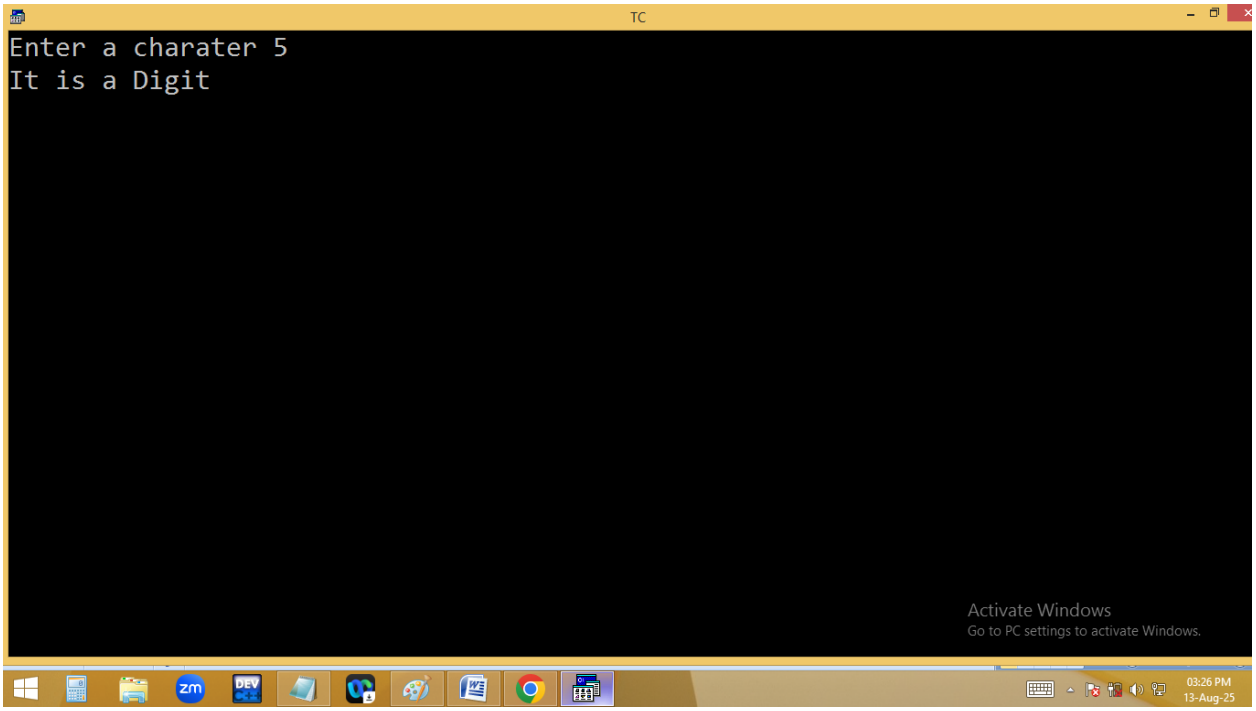


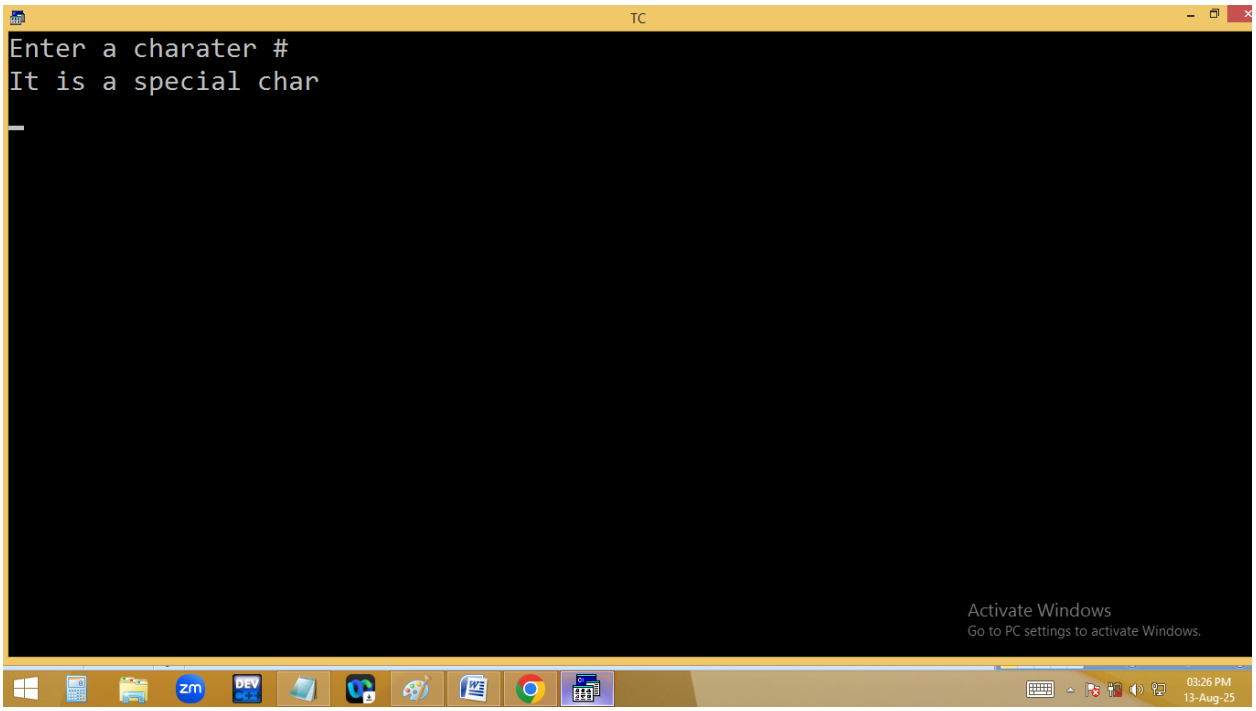
Using predefined functions?

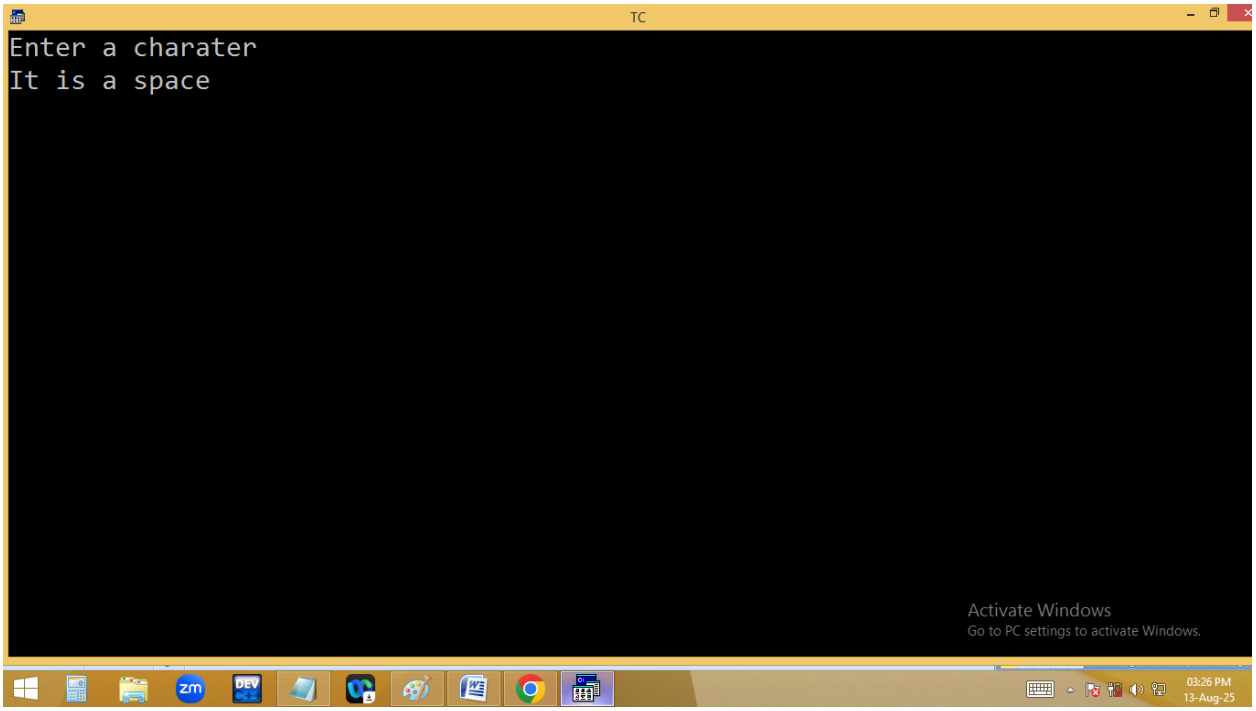

TC
File Edit Run Compile Project Options Debug Break/watch
Line 3 Col 18 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); ch=getchar();
if(islower(ch))puts("Lower case char");
else if(isupper(ch))puts("Upper 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();
}
Activate Windows
Go to PC settings to activate Windows.
03:25 PM
13-Aug-25


TC
Enter a charater M
Upper case char
Activate Windows
Go to PC settings to activate Windows.
03:25 PM
13-Aug-25

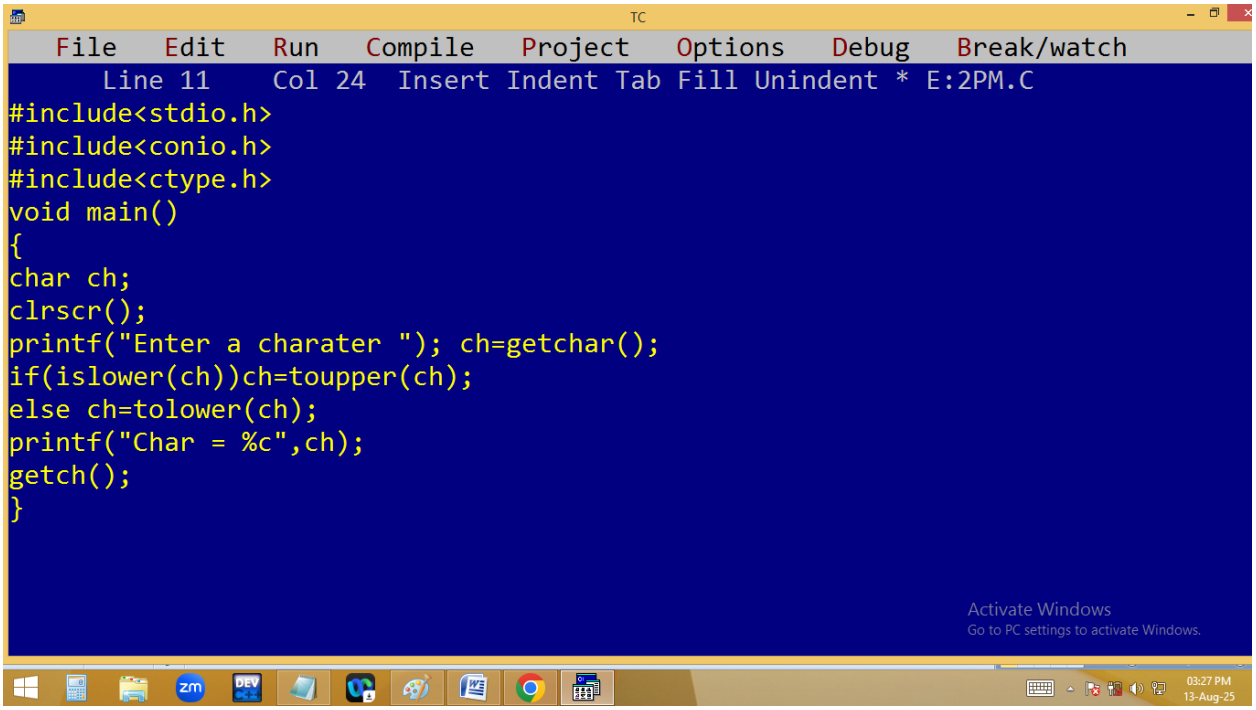

TC
Enter a charater g
Lower case char
Activate Windows
Go to PC settings to activate Windows.
03:25 PM
13-Aug-25

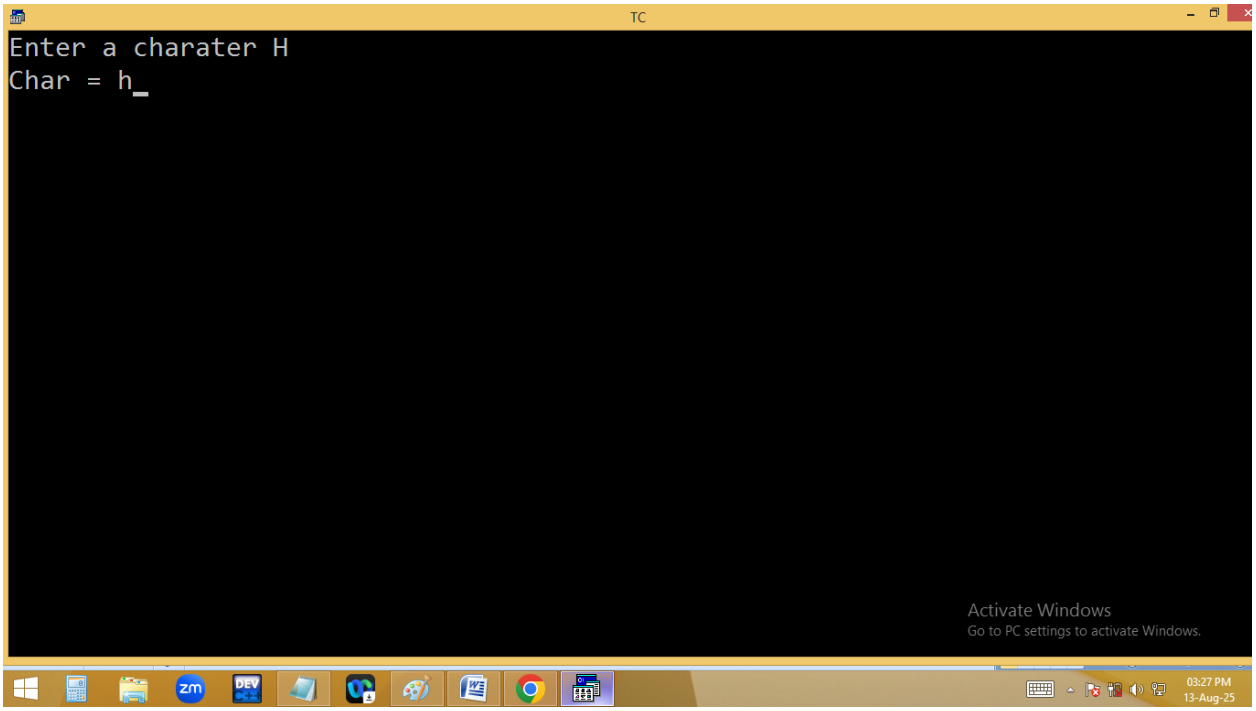

TC
Enter a charater 5
It is a Digit
Activate Windows
Go to PC settings to activate Windows.
03:26 PM
13-Aug-25

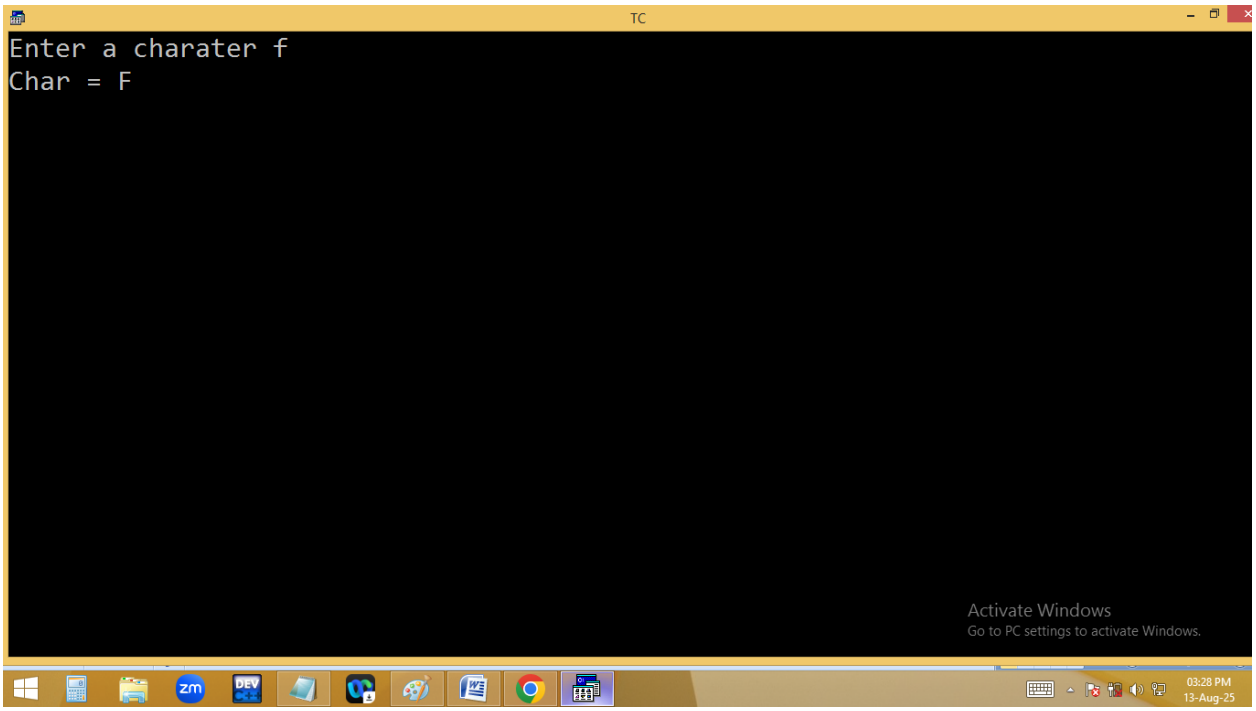

TC
Enter a charater #
It is a special char
Activate Windows
Go to PC settings to activate Windows.
03:26 PM
13-Aug-25

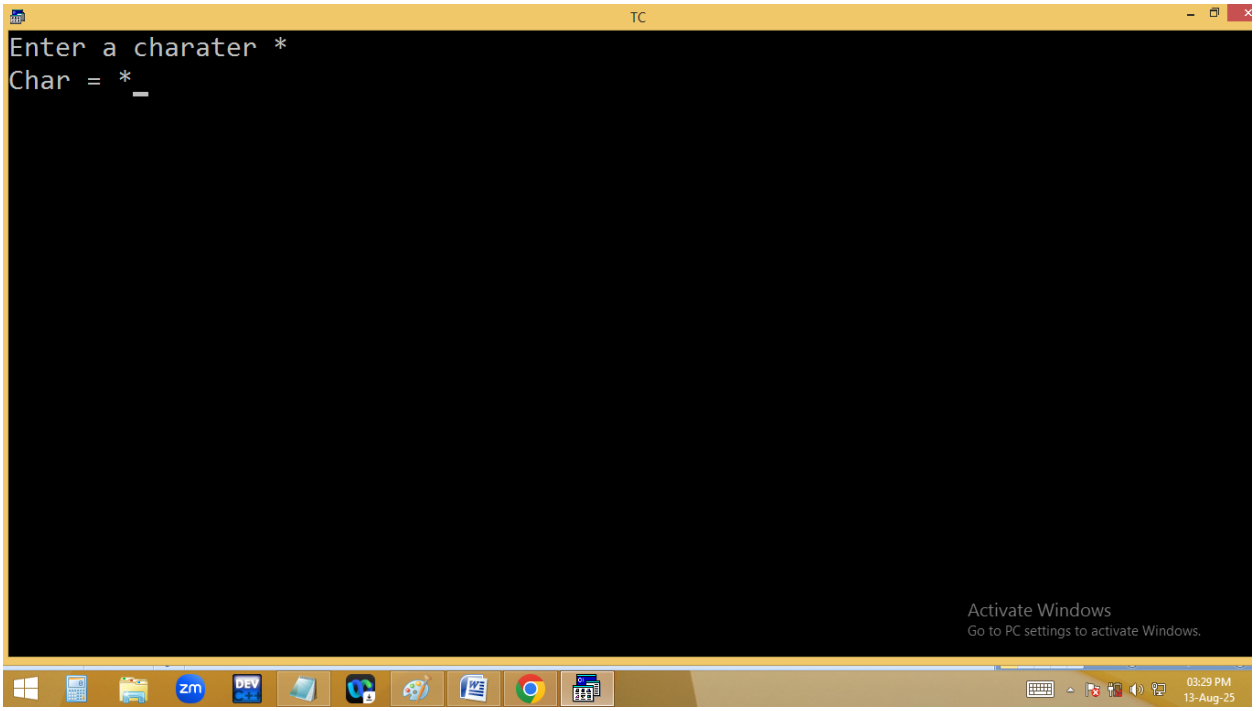

TC
Enter a charater
It is a space
Activate Windows
Go to PC settings to activate Windows.
03:26 PM
13-Aug-25

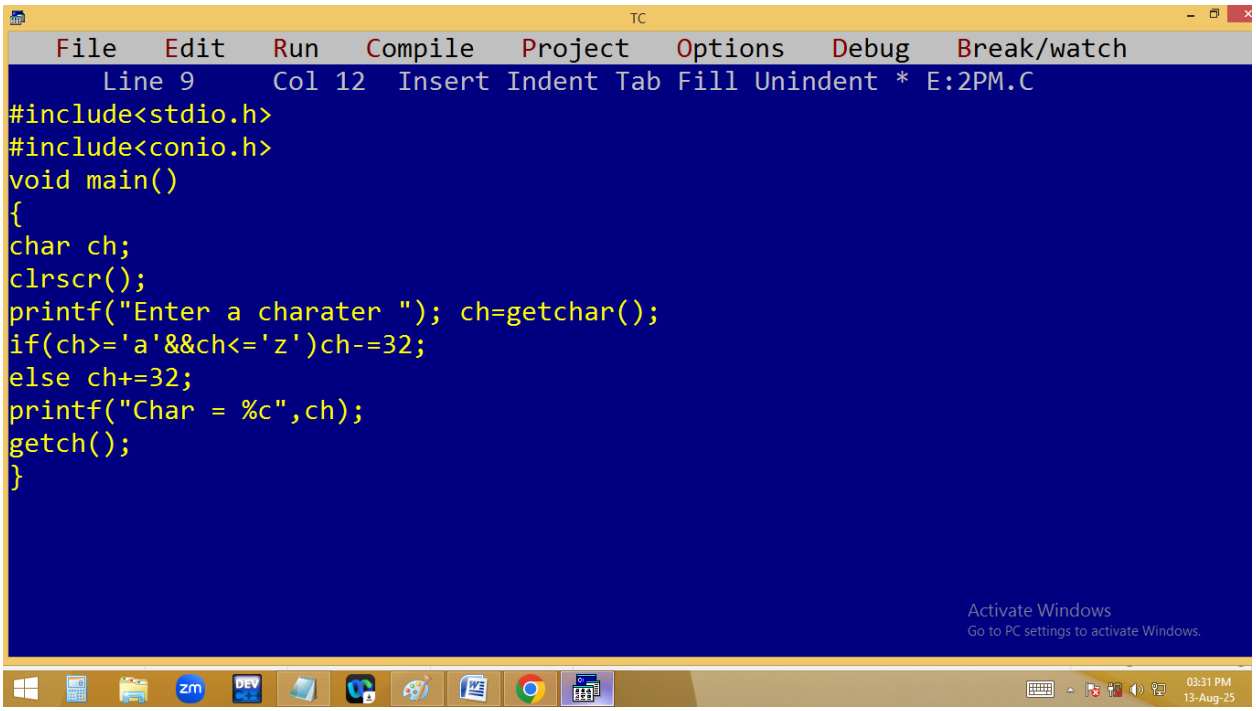
Lower to upper / upper to lower:

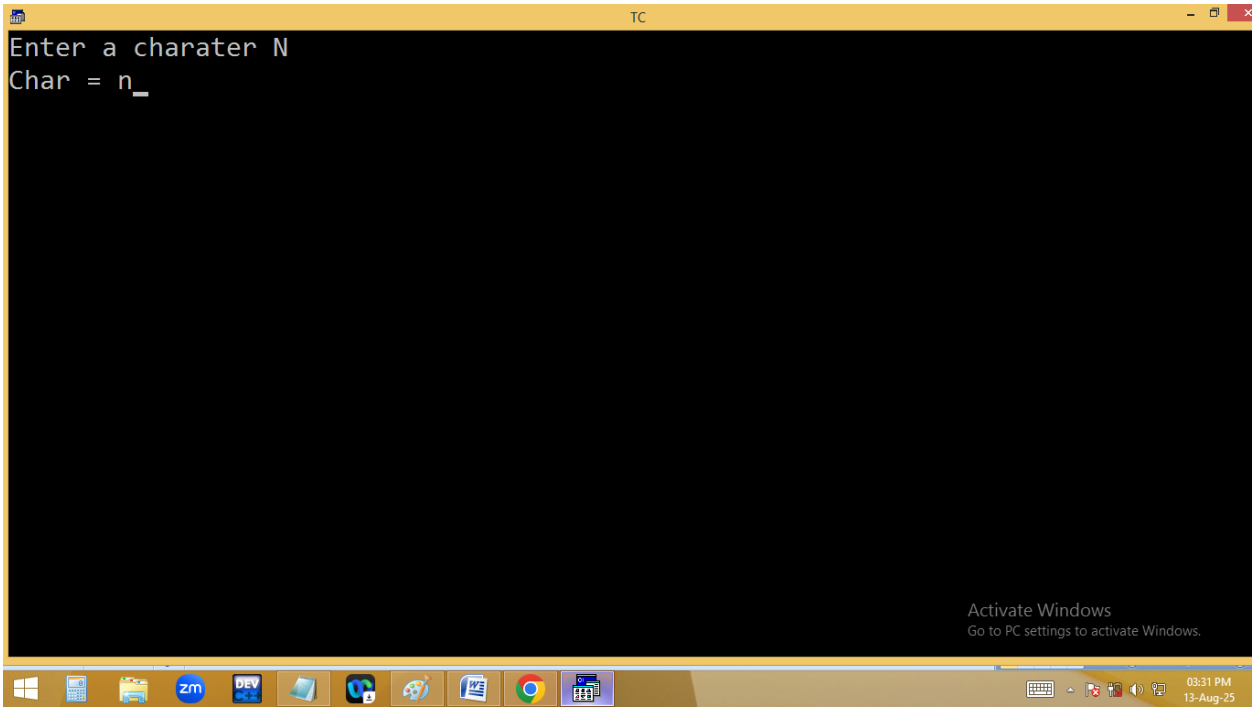


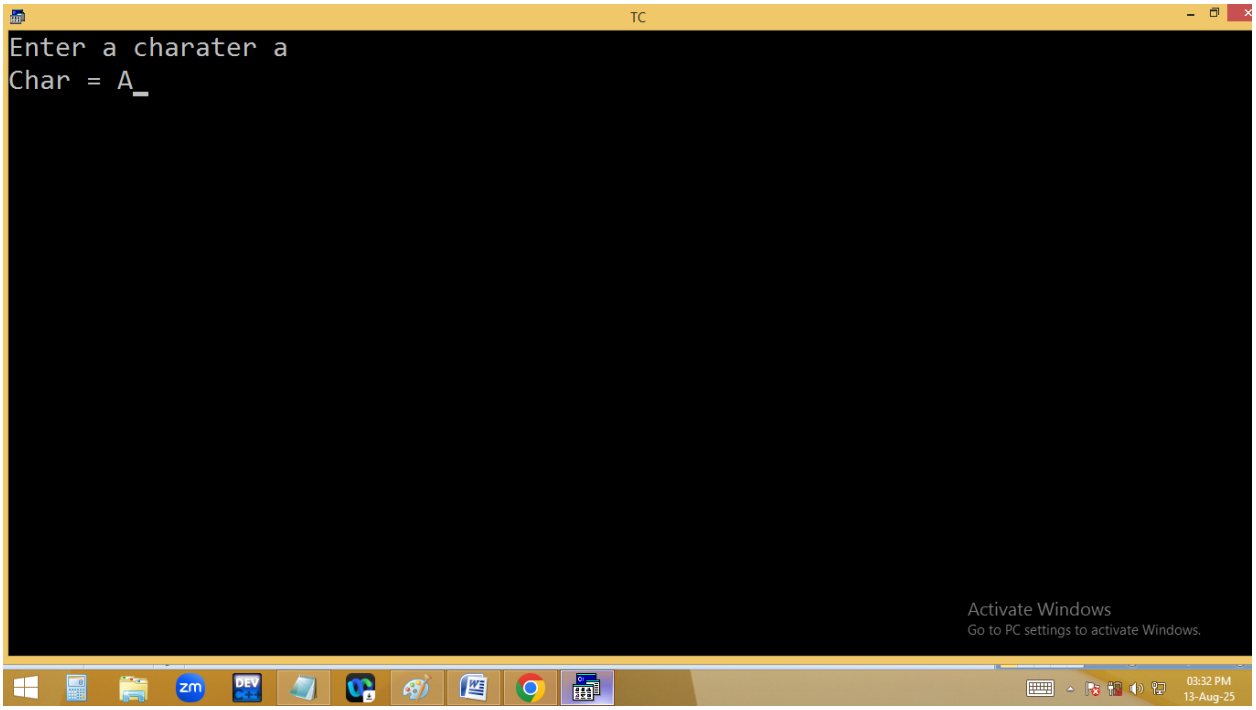


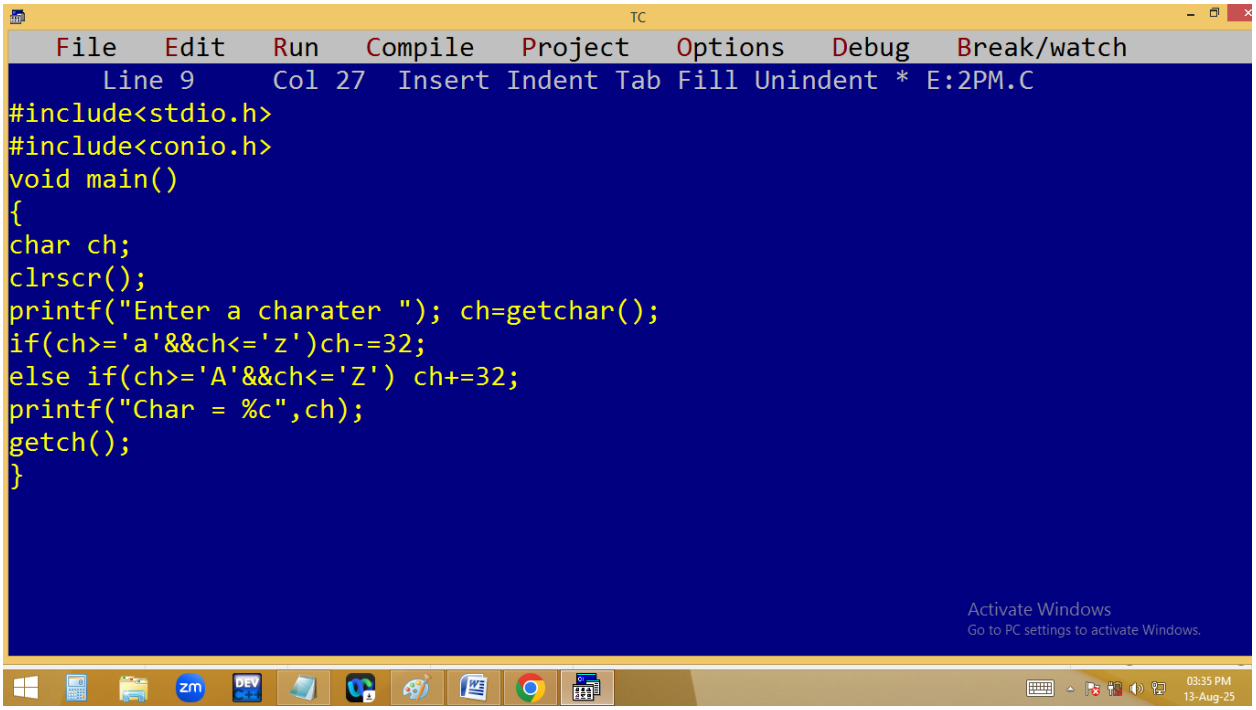

TC
Enter a charater f
Char = F
Activate Windows
Go to PC settings to activate Windows.
03:28 PM
13-Aug-25

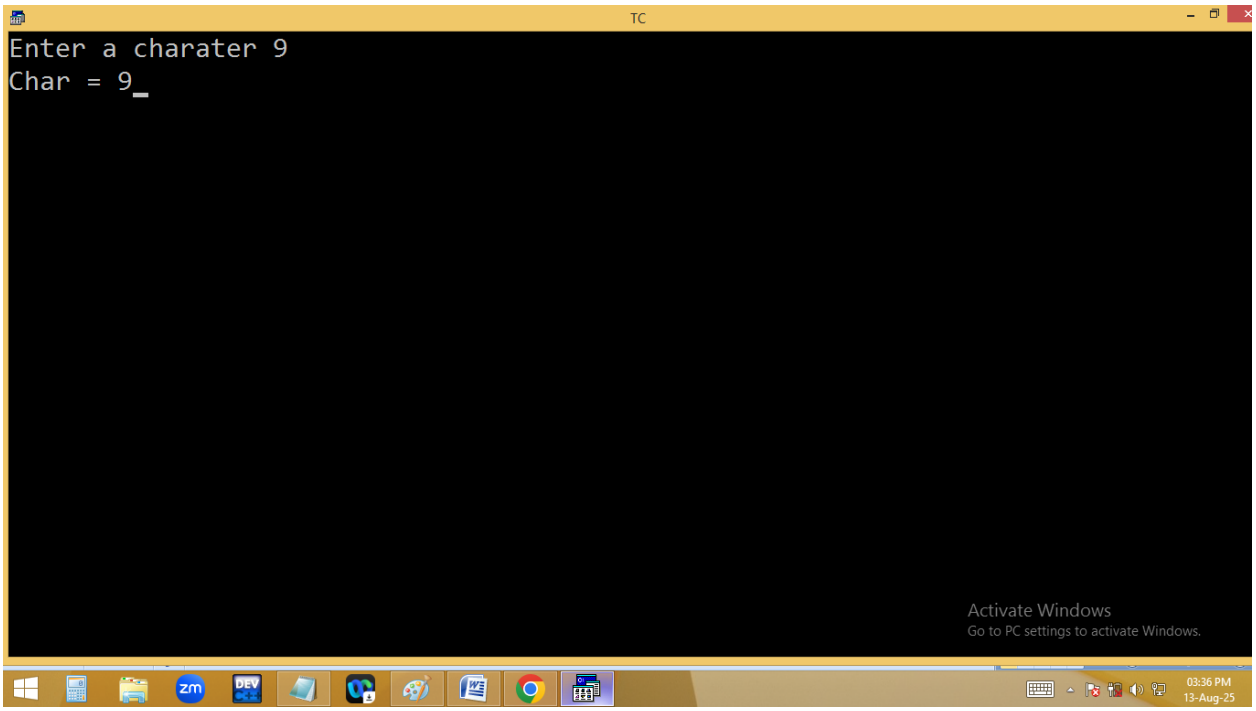

TC
Enter a charater *
Char = *
Activate Windows
Go to PC settings to activate Windows.
03:29 PM
13-Aug-25

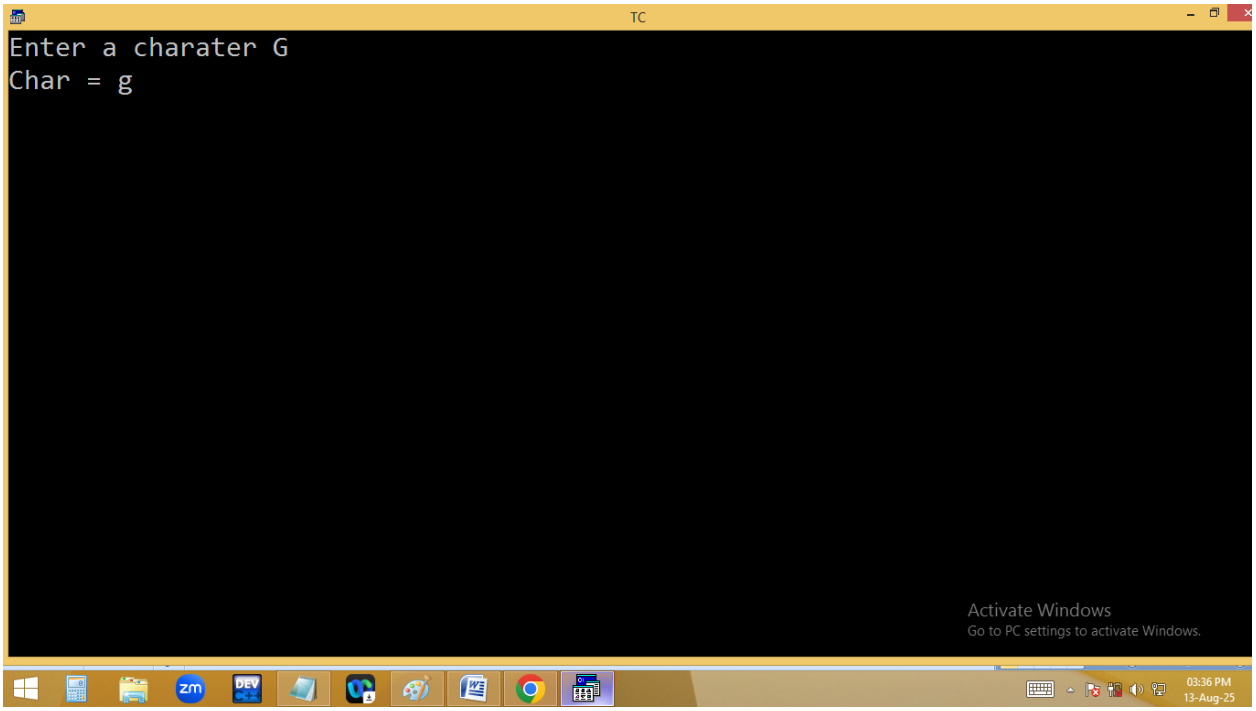

TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 12 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a charater "); ch=getchar();
if(ch>='a'&&ch<='z')ch-=32;
else ch+=32;
printf("Char = %c",ch);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
03:31 PM
13-Aug-25

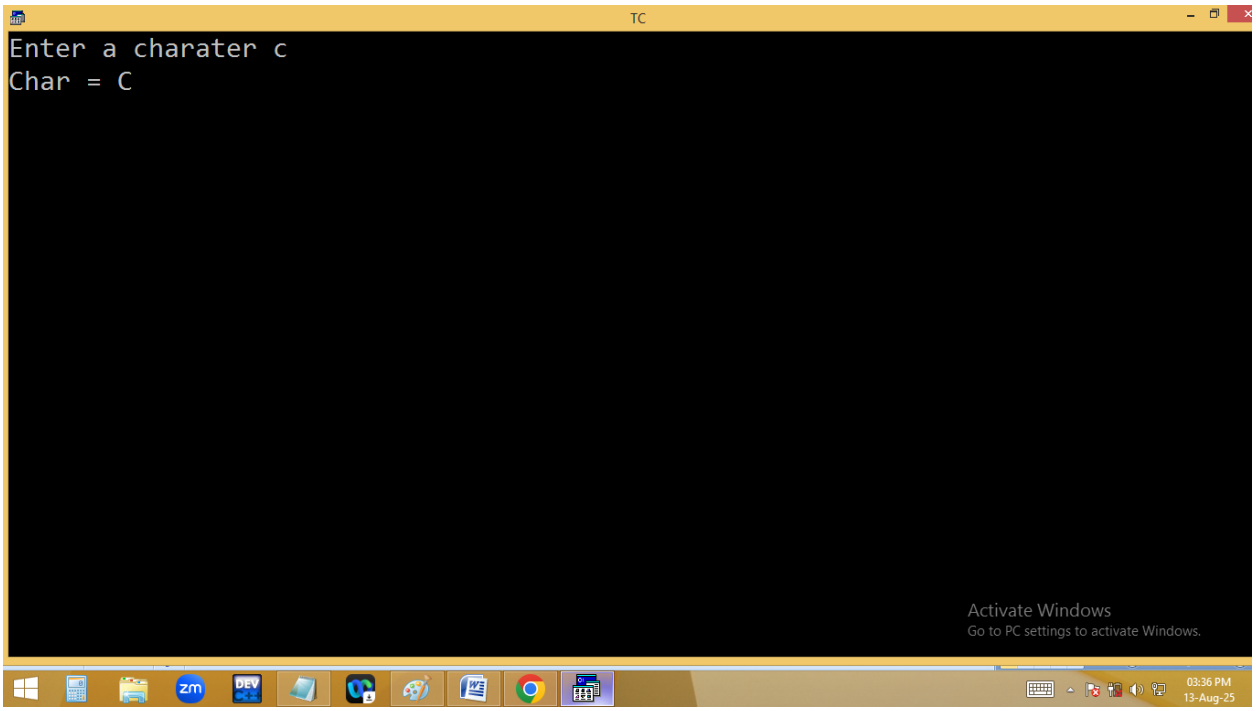

TC
Enter a charater N
Char = n
Activate Windows
Go to PC settings to activate Windows.
03:31 PM
13-Aug-25

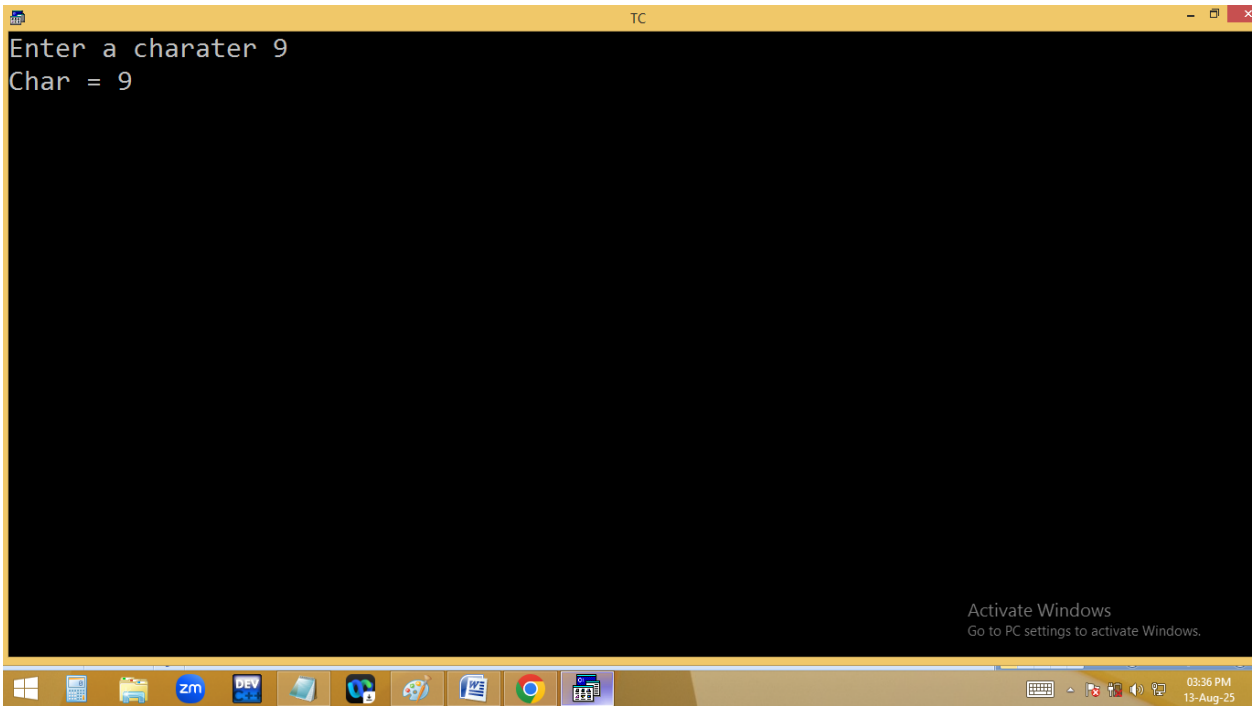

TC
Enter a charater a
Char = A
Activate Windows
Go to PC settings to activate Windows.
03:32 PM
13-Aug-25


TC
File Edit Run Compile Project Options Debug Break/watch
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 charater "); ch=getchar();
if(ch>='a'&&ch<='z')ch-=32;
else if(ch>='A'&&ch<='Z') ch+=32;
printf("Char = %c",ch);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
03:35 PM
13-Aug-25


TC
Enter a charater 9
Char = 9
Activate Windows
Go to PC settings to activate Windows.
03:36 PM
13-Aug-25


TC
Enter a charater G
Char = g
Activate Windows
Go to PC settings to activate Windows.
03:36 PM
13-Aug-25


TC
Enter a charater c
Char = C
Activate Windows
Go to PC settings to activate Windows.
03:36 PM
13-Aug-25



$X = 42$

32

$74 - J$

$9 = 57$

32

$89 - Y$

ch

a = 97

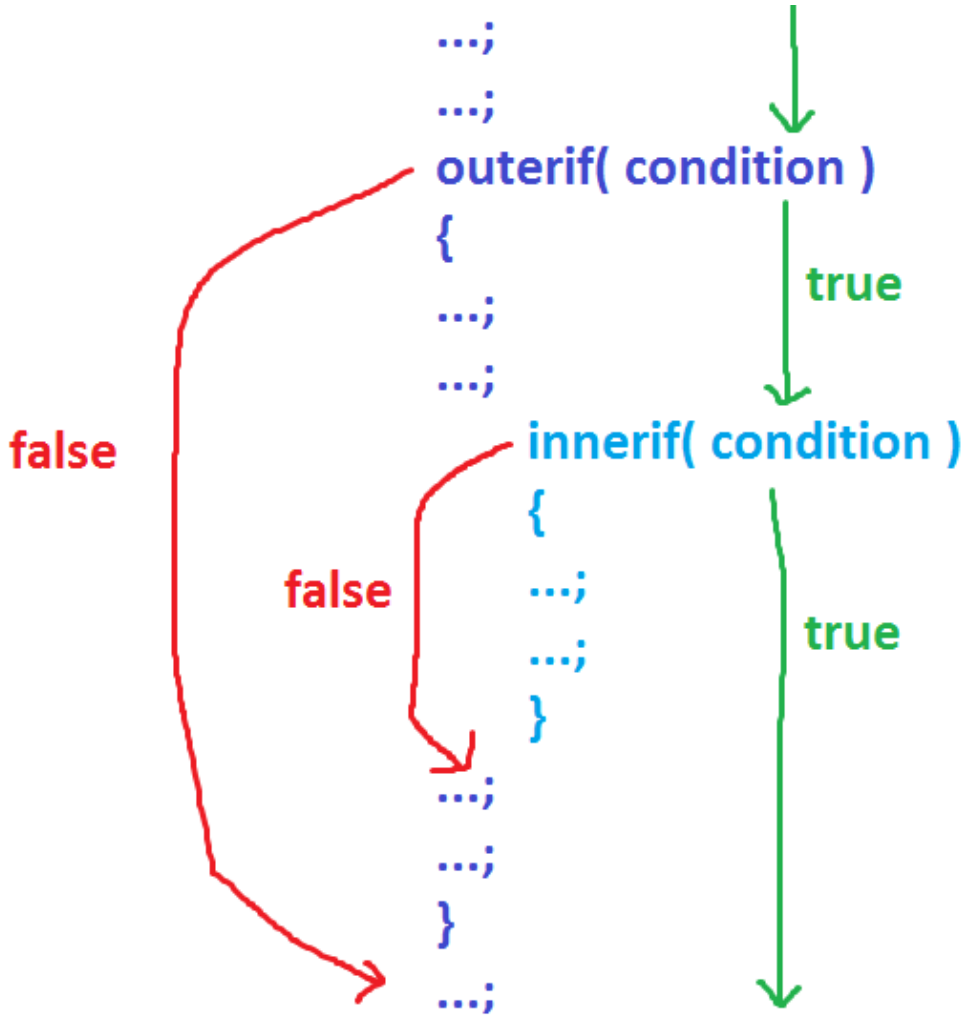
-32

A = 65

+32

a = 97

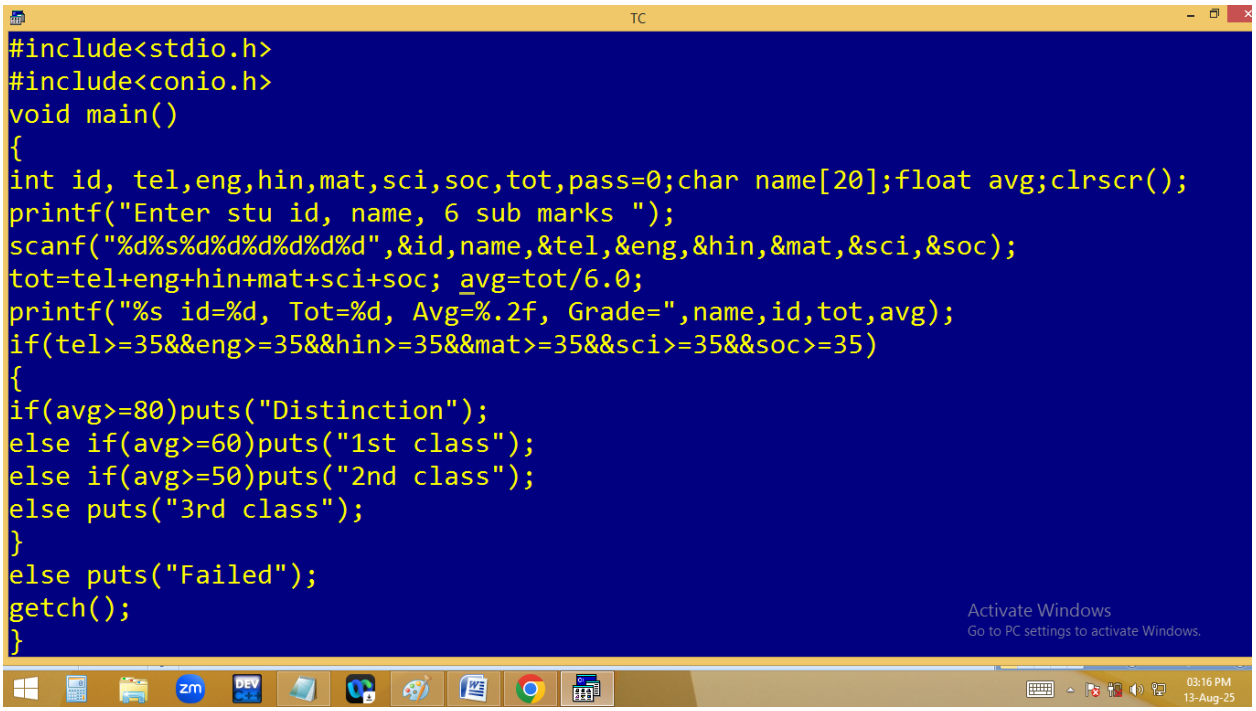
Nested if: If within if is called nested if.

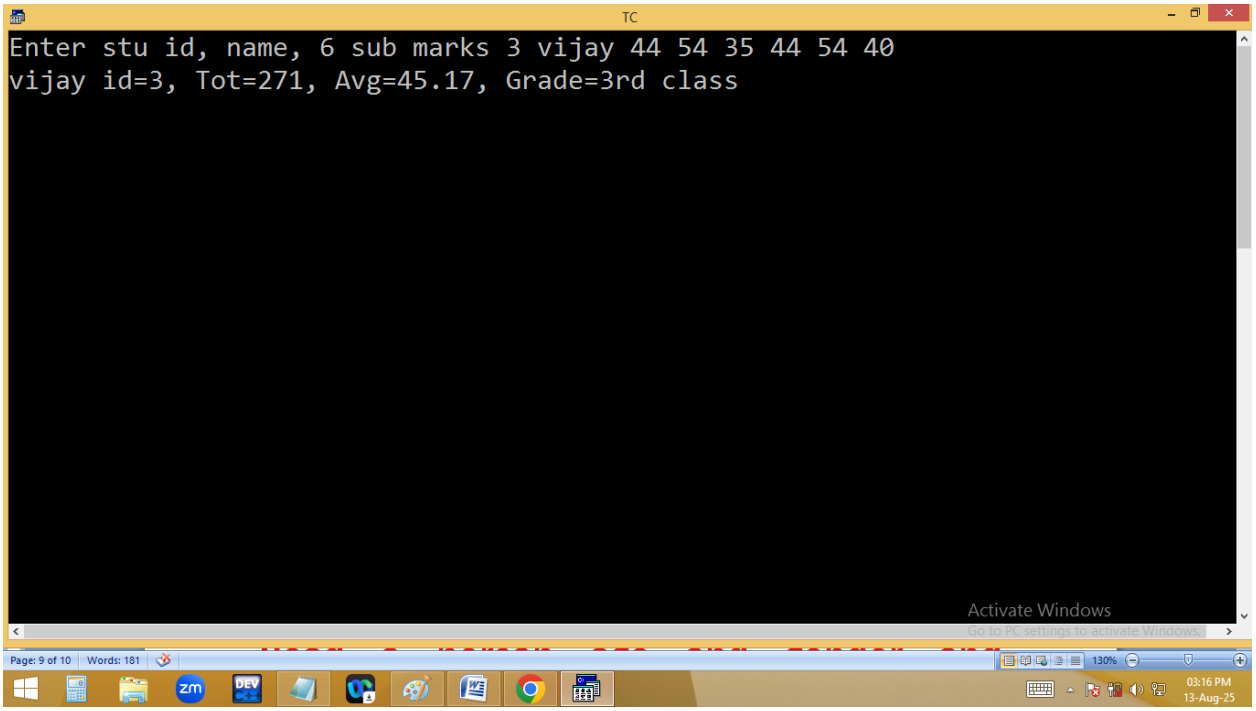


Read a stu id, name, 6 sub marks. Find tot, avg and grade based on below avg using nested if.

Avg	Grade
>=80	Distinction
>=60	1st

>=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%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

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