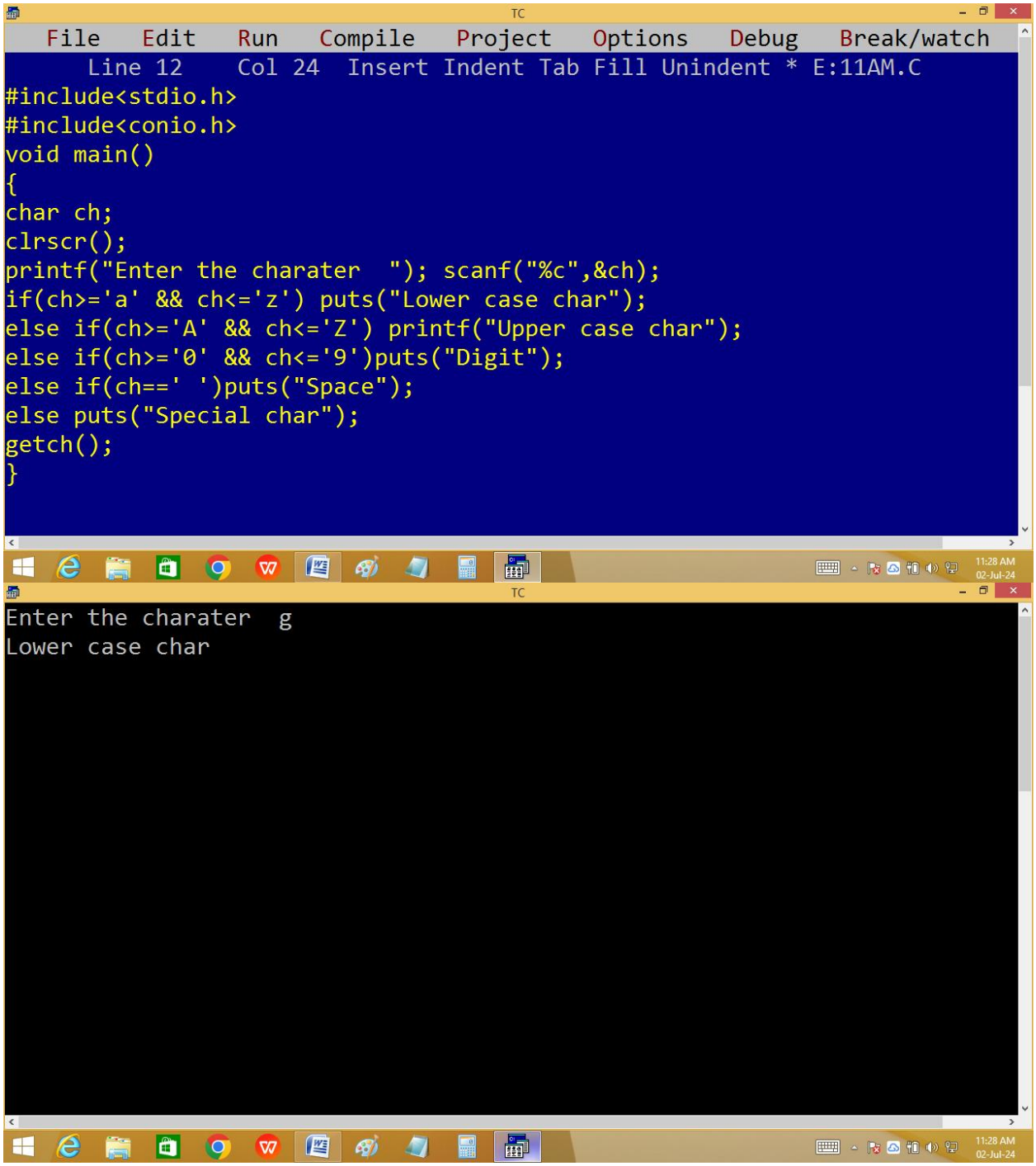
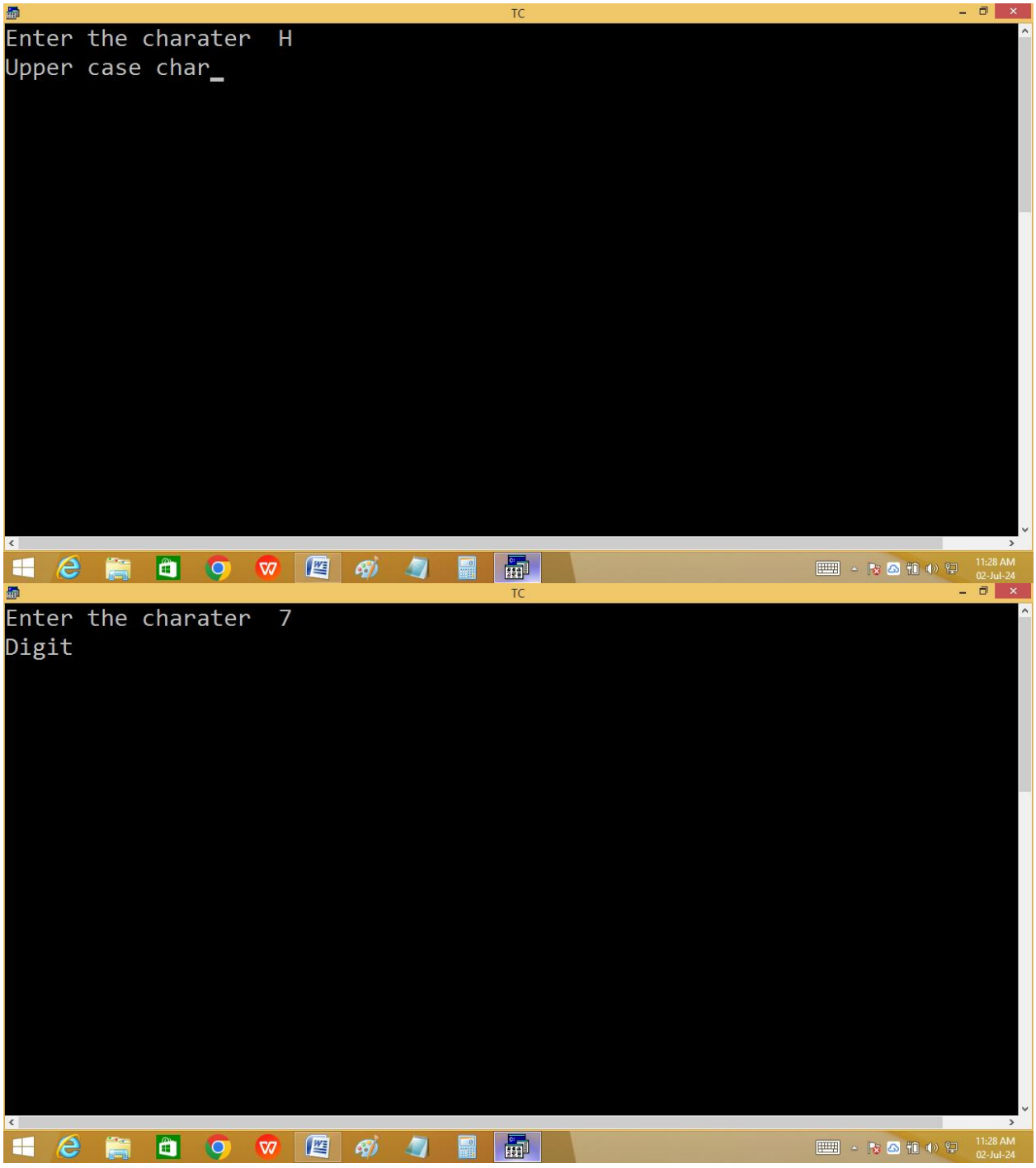
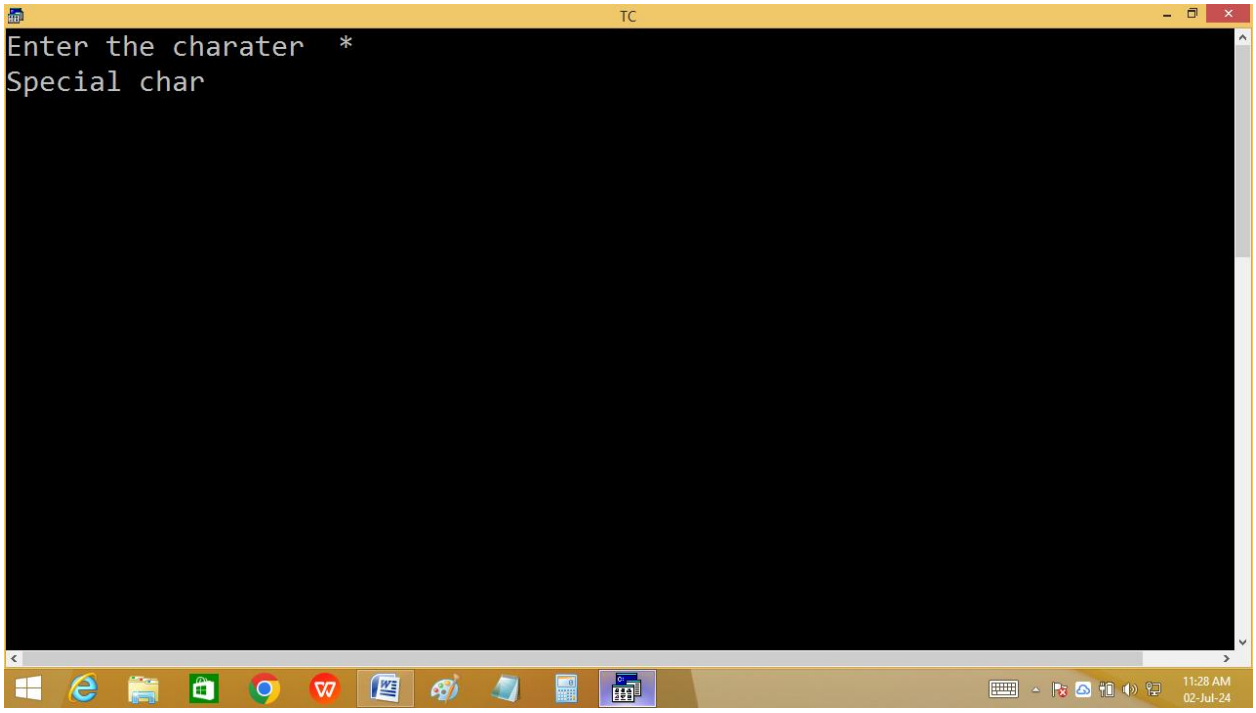
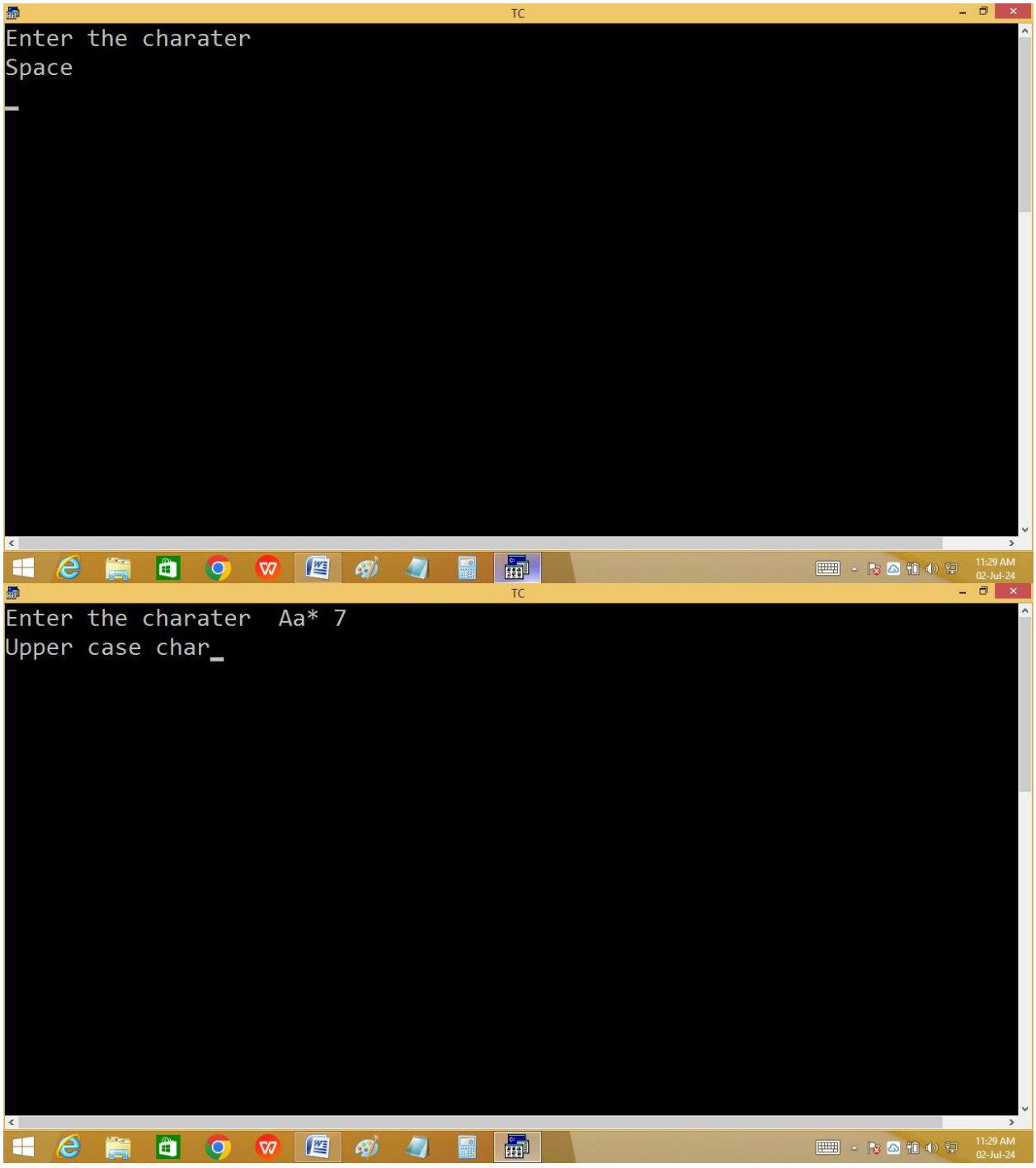
# Finding lower / upper / digit / space / special char.

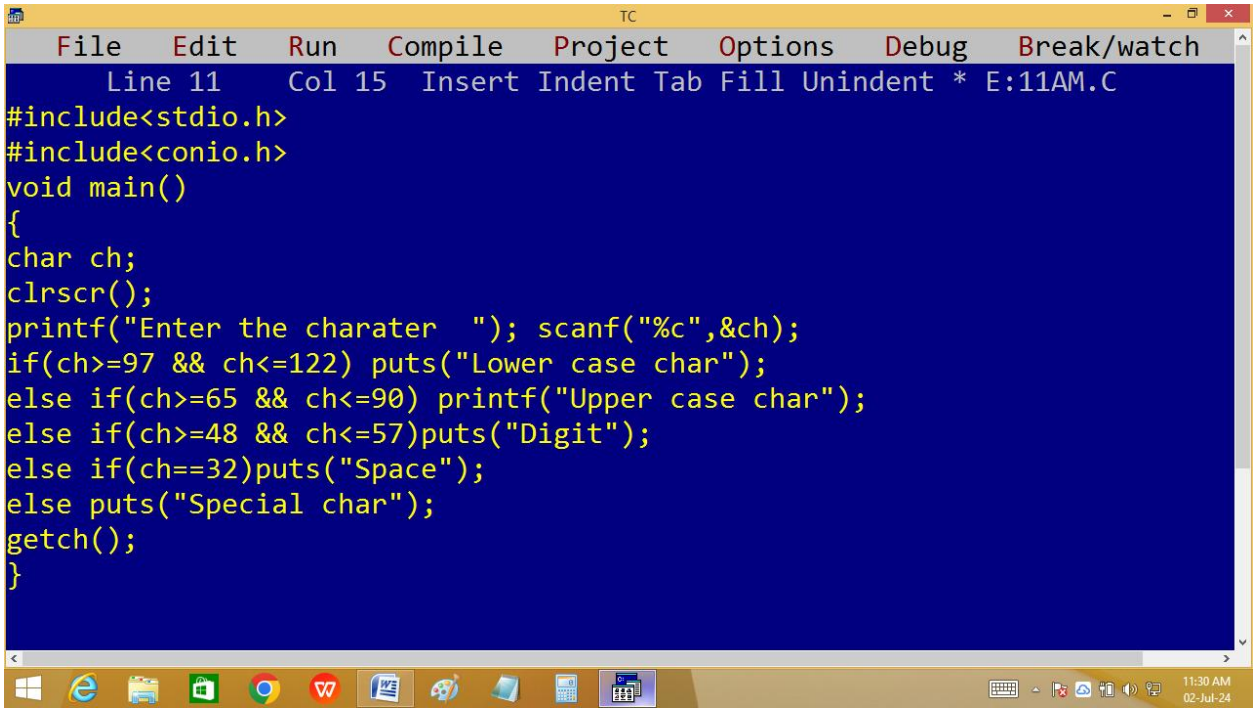


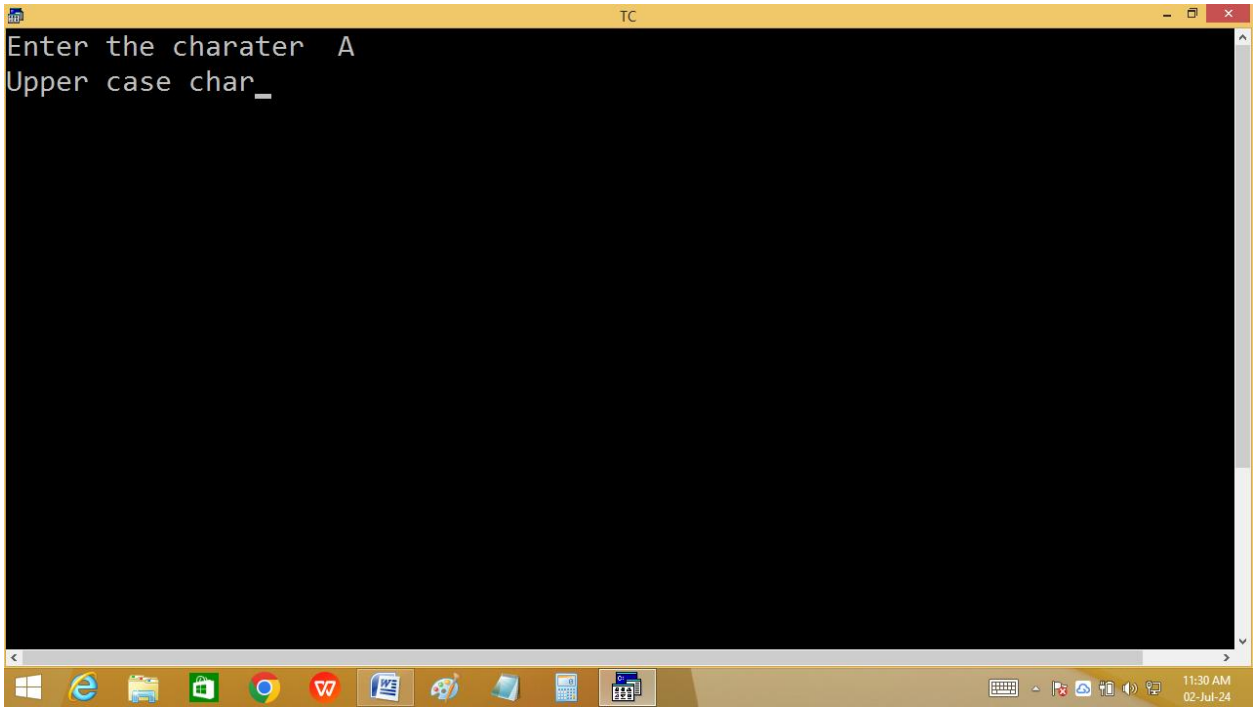

TC
Enter the charater  H
Upper case char
TC
Enter the charater  7
Digit

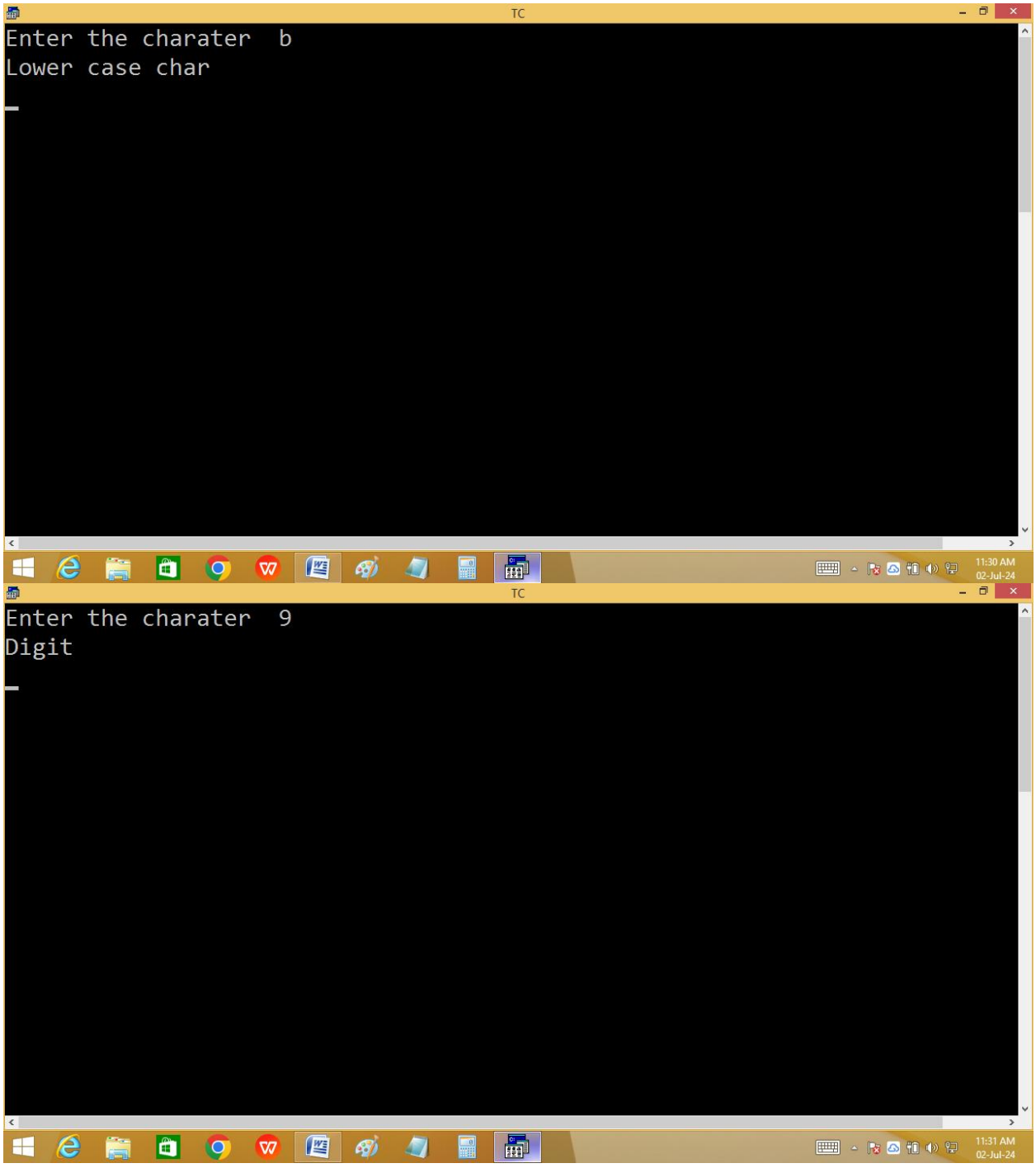

TC
Enter the charater *
Special char
11:28 AM
02-Jul-24

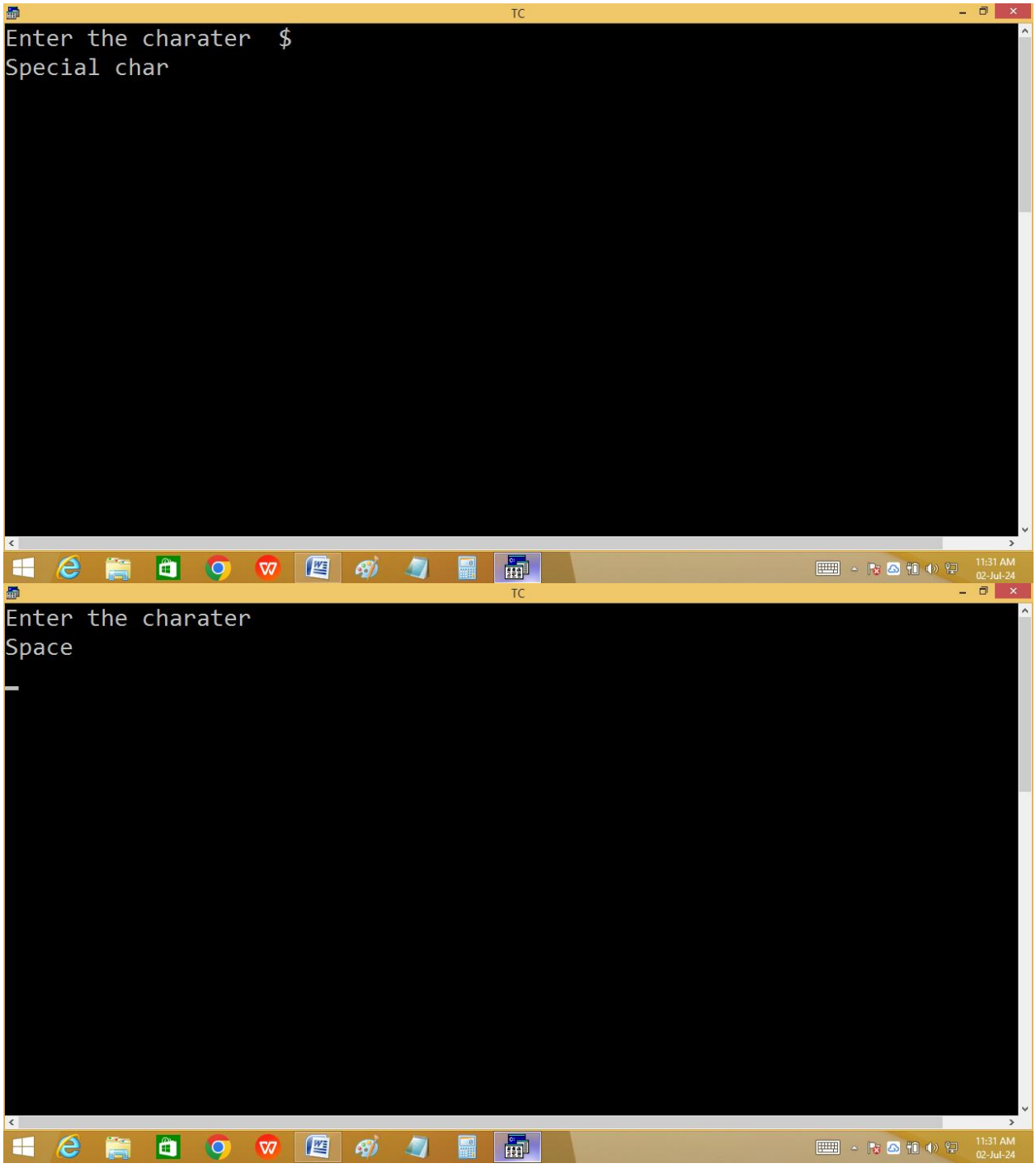



## Using ascii values:

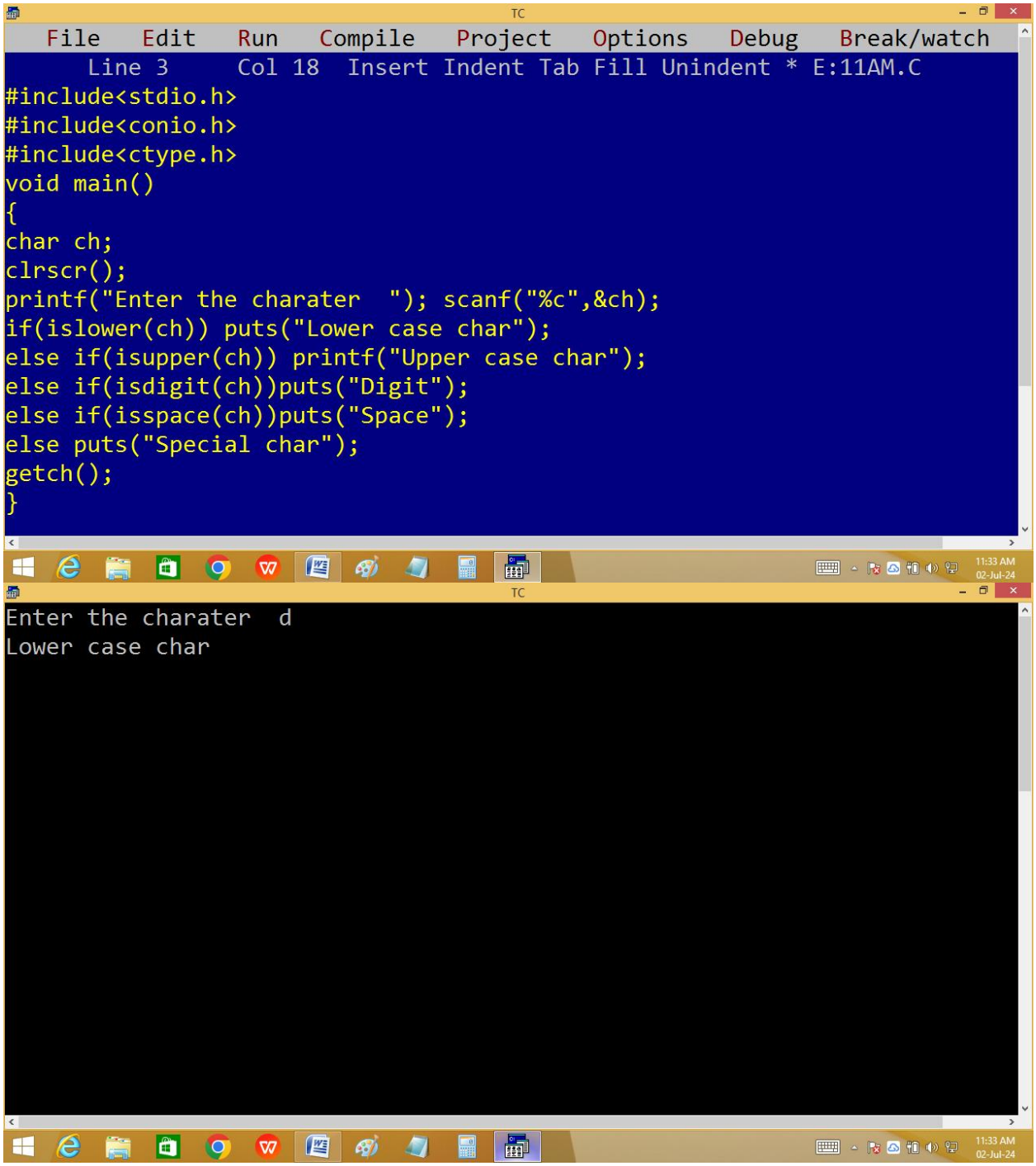

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 15 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter the charater "); scanf("%c",&ch);
if(ch>=97 && ch<=122) puts("Lower case char");
else if(ch>=65 && ch<=90) printf("Upper case char");
else if(ch>=48 && ch<=57)puts("Digit");
else if(ch==32)puts("Space");
else puts("Special char");
getch();
}
11:30 AM
02-Jul-24

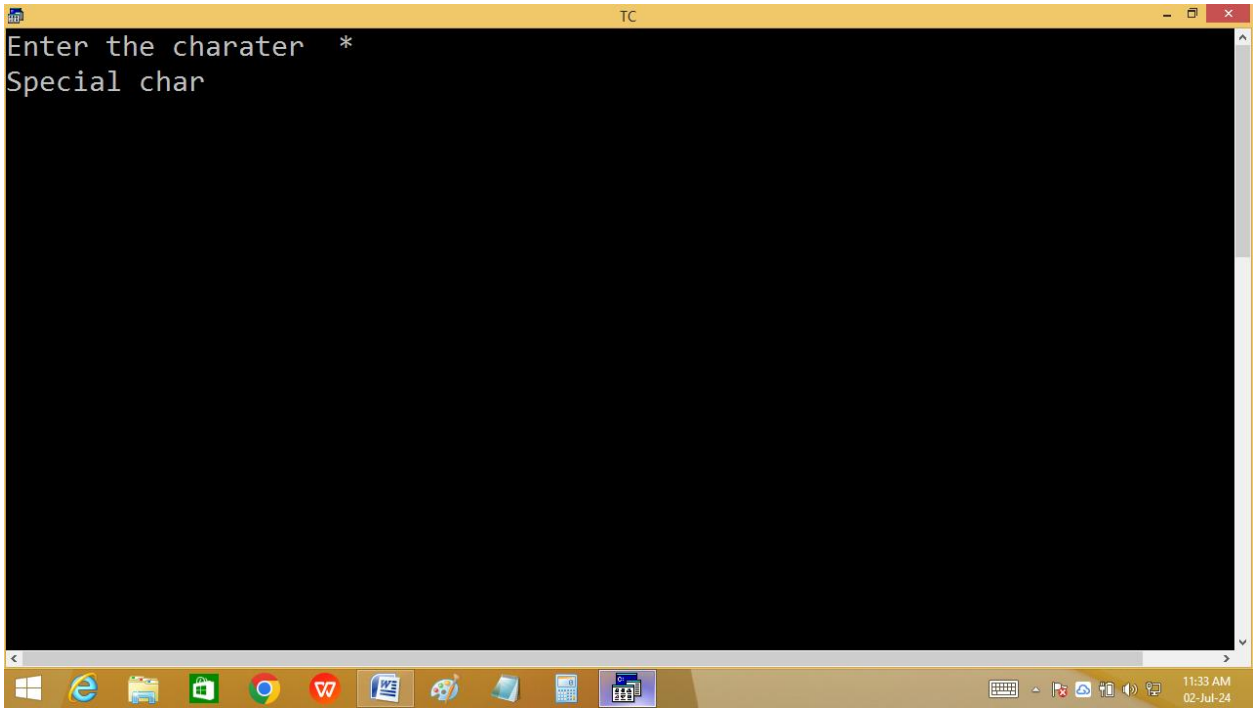

TC
Enter the charater A
Upper case char
11:30 AM
02-Jul-24

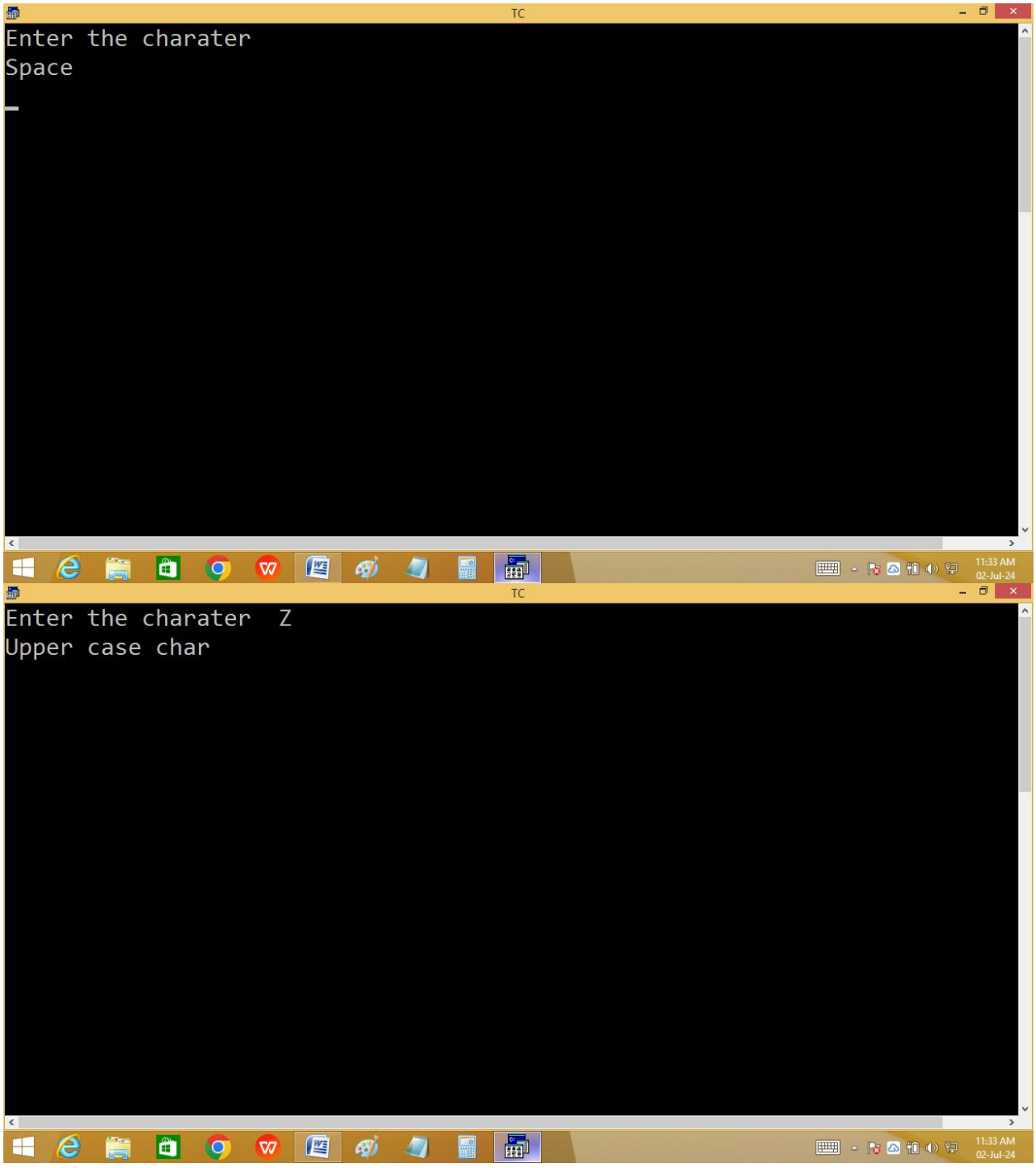

TC
Enter the charater  b
Lower case char
TC
Enter the charater  9
Digit

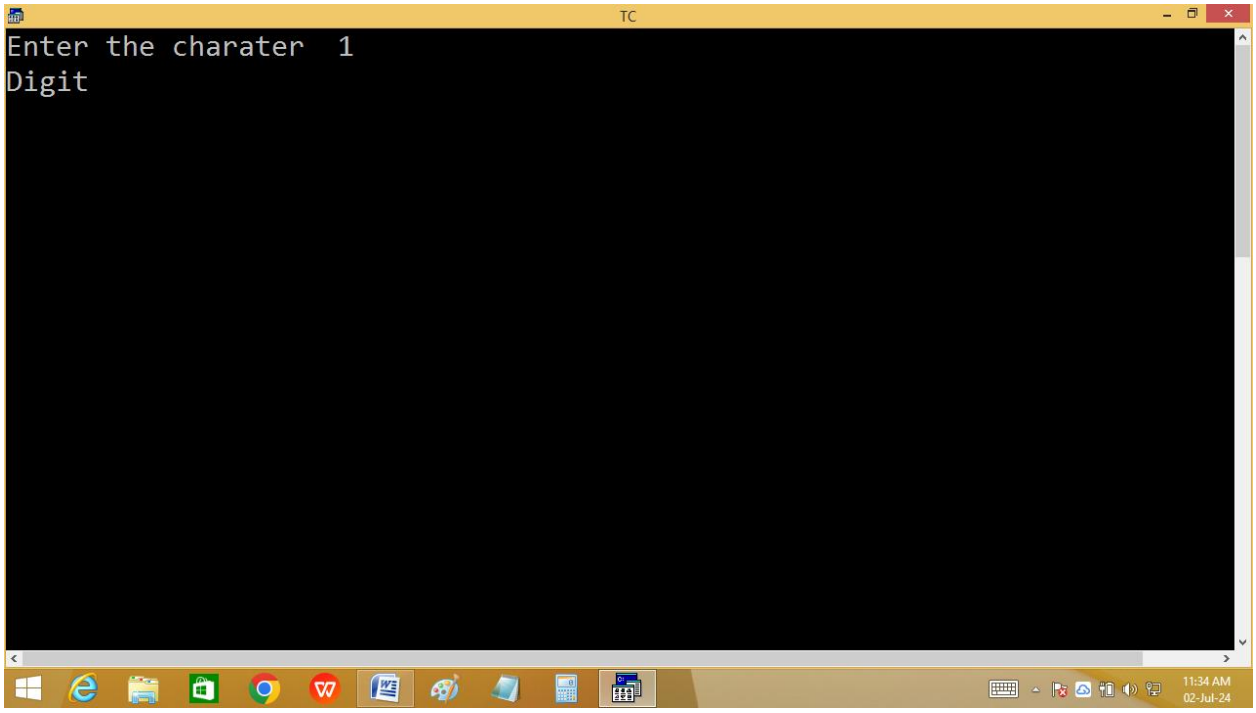

TC
Enter the charater $
Special char
TC
Enter the charater
Space
11:31 AM
02-Jul-24
11:31 AM
02-Jul-24

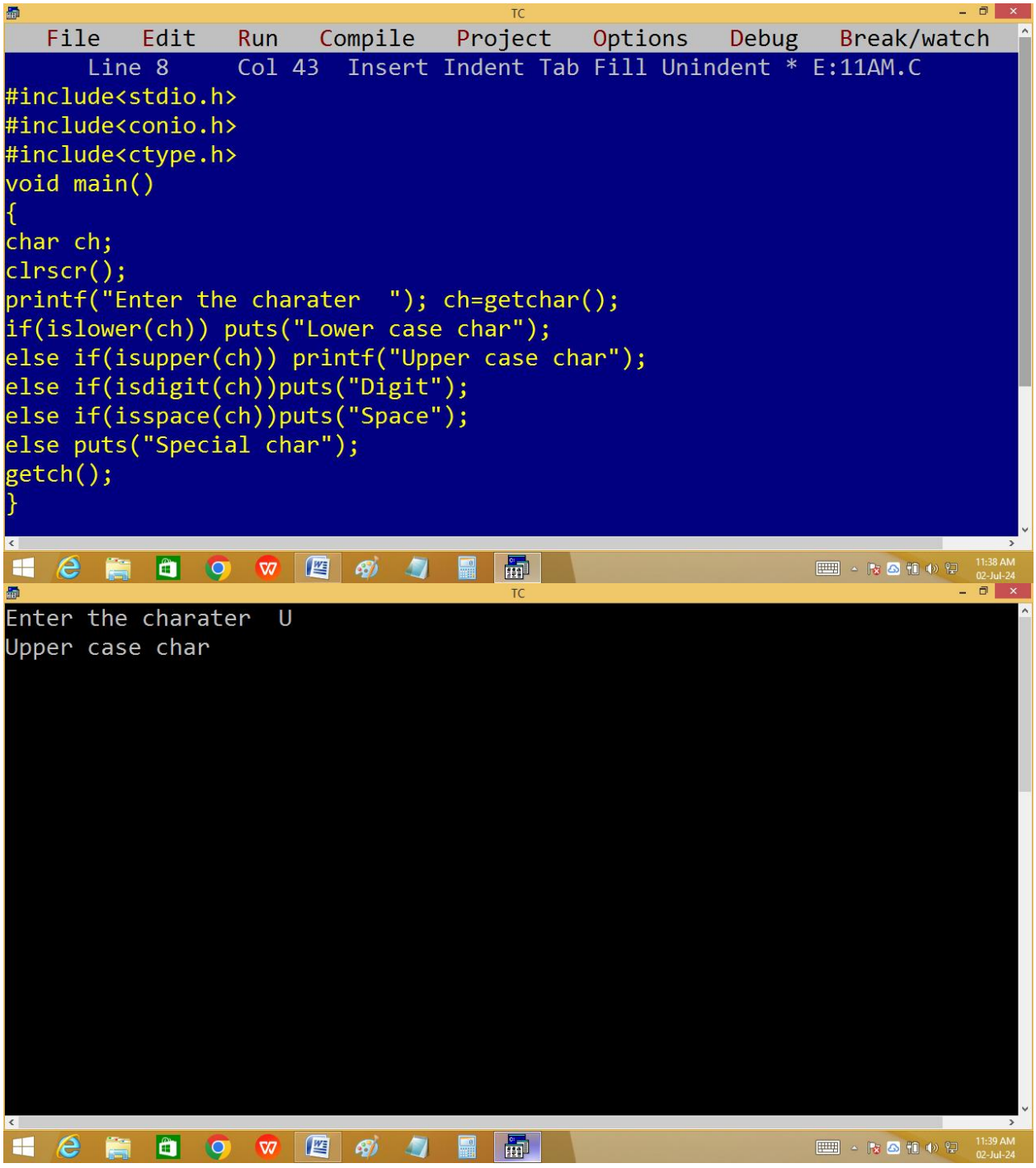
# Using predefined functions:




TC
Enter the charater *
Special char
11:33 AM
02-Jul-24


TC
Enter the charater
Space
TC
Enter the charater  Z
Upper case char


TC
Enter the charater 1
Digit
11:34 AM
02-Jul-24




| getch() | getche() | getchar() |
|---|---|---|
| Reads single char | Reads single char | Reads single char |
| Entered char is not visible | char is visible | char is visible |

| Not waiting for enter key | Not waiting for enter key | Waiting for enter key |
|---|---|---|
| Belongs to conio.h | Belongs to conio.h | Belongs to stdio.h |
| char not changeable | char not changeable | char changeable |

**Note:** All the above functions returns ASCII value(int) of reading character.

**isupper(), islower(), isdigit(), isspace():**

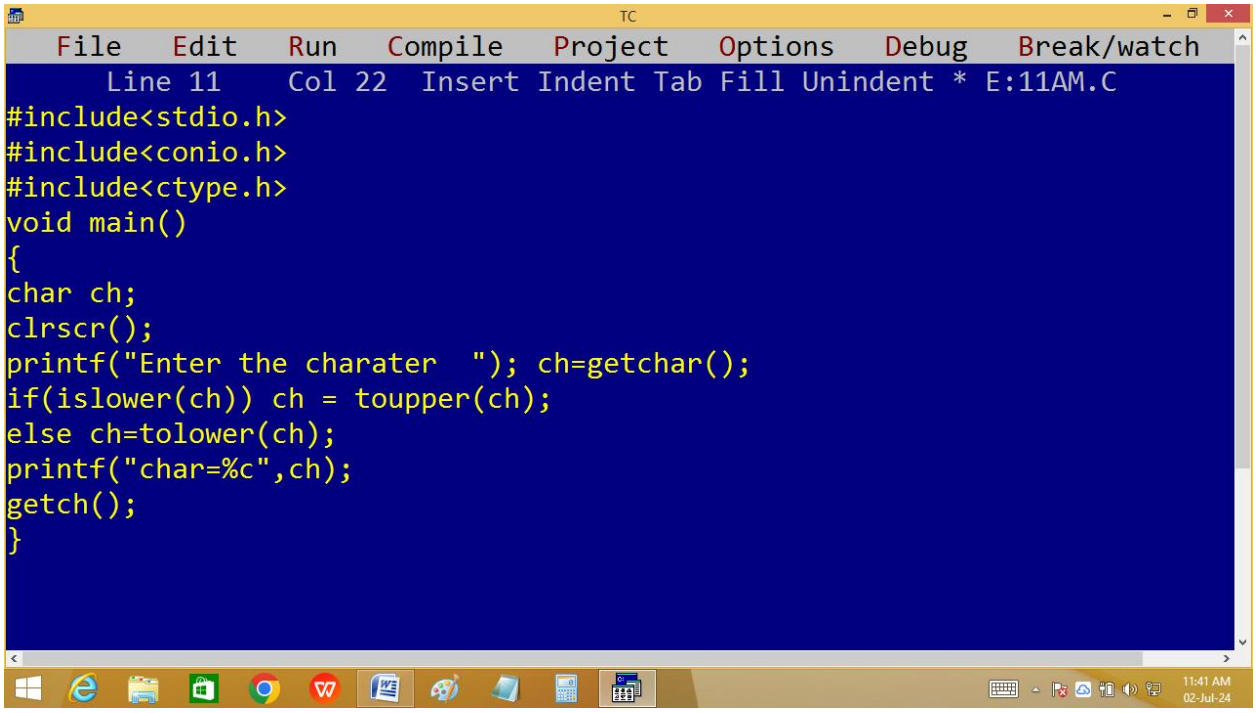
They are used to check the given character is upper / lower/ digit / space.

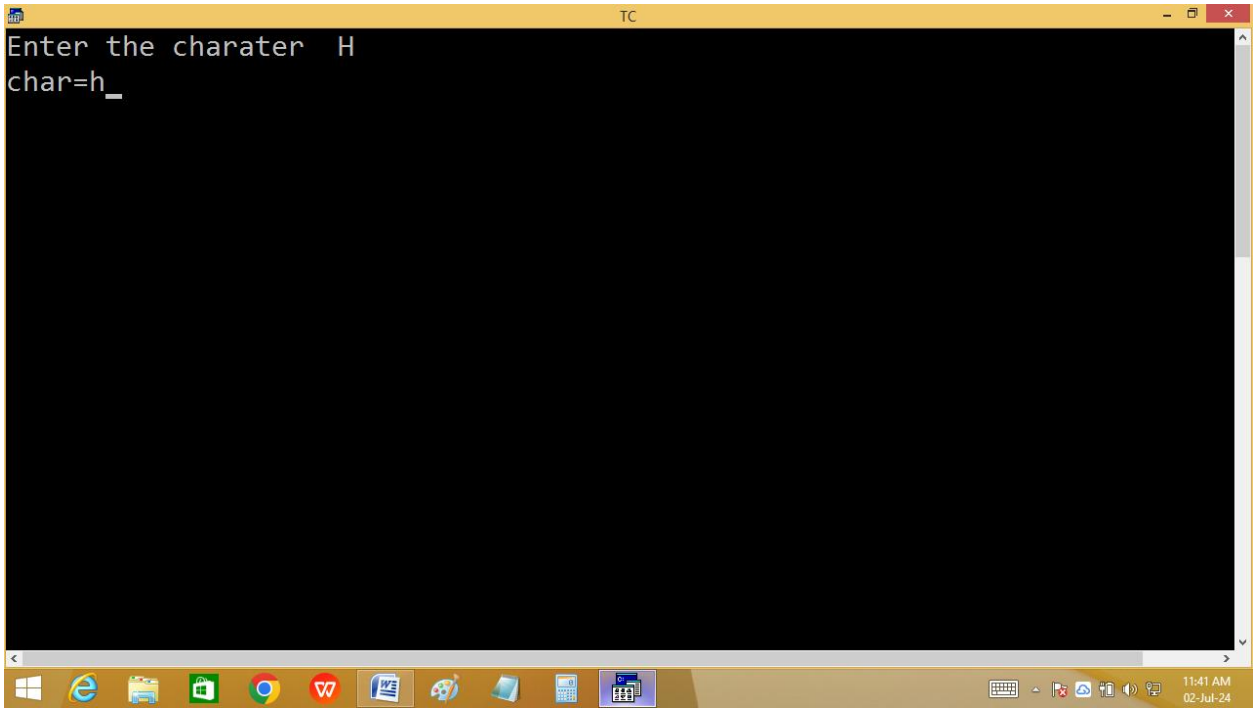
**tolower(), toupper():** They are used to convert the character from upper case to lower and lower to upper.

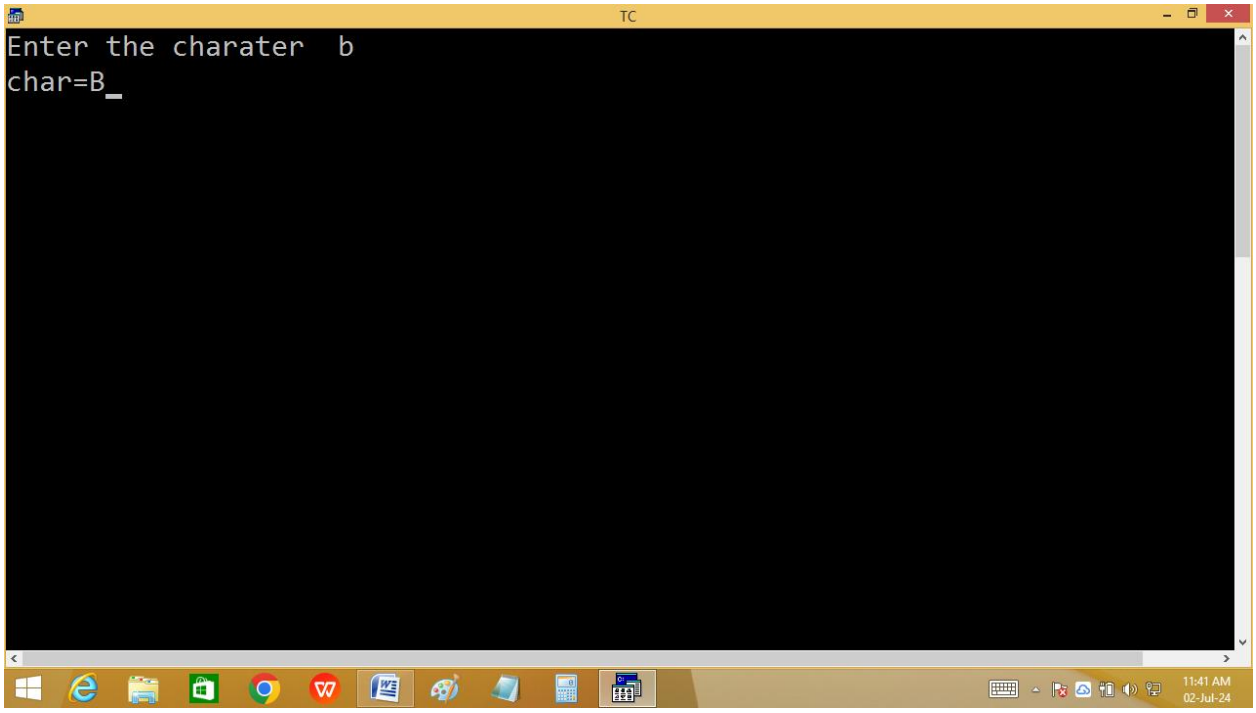
All these functions / macros available in <ctype.h>

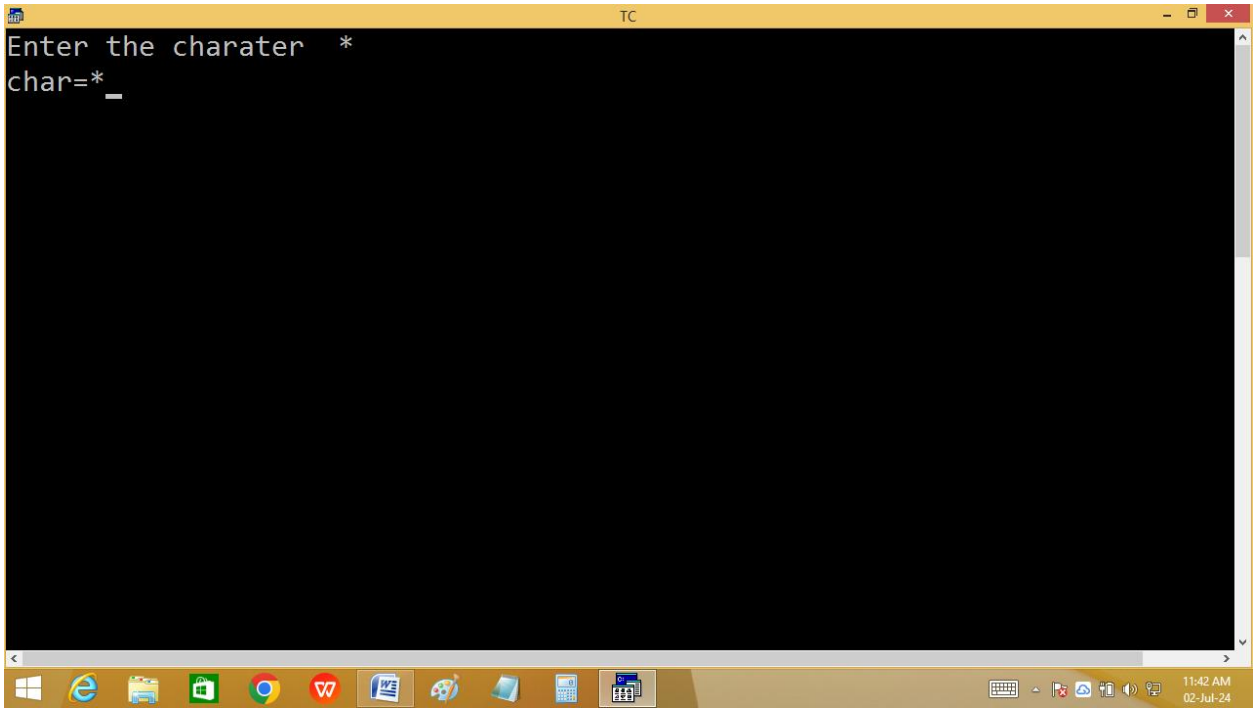
## Lower to upper / upper to lower:

## Using predefined functions:

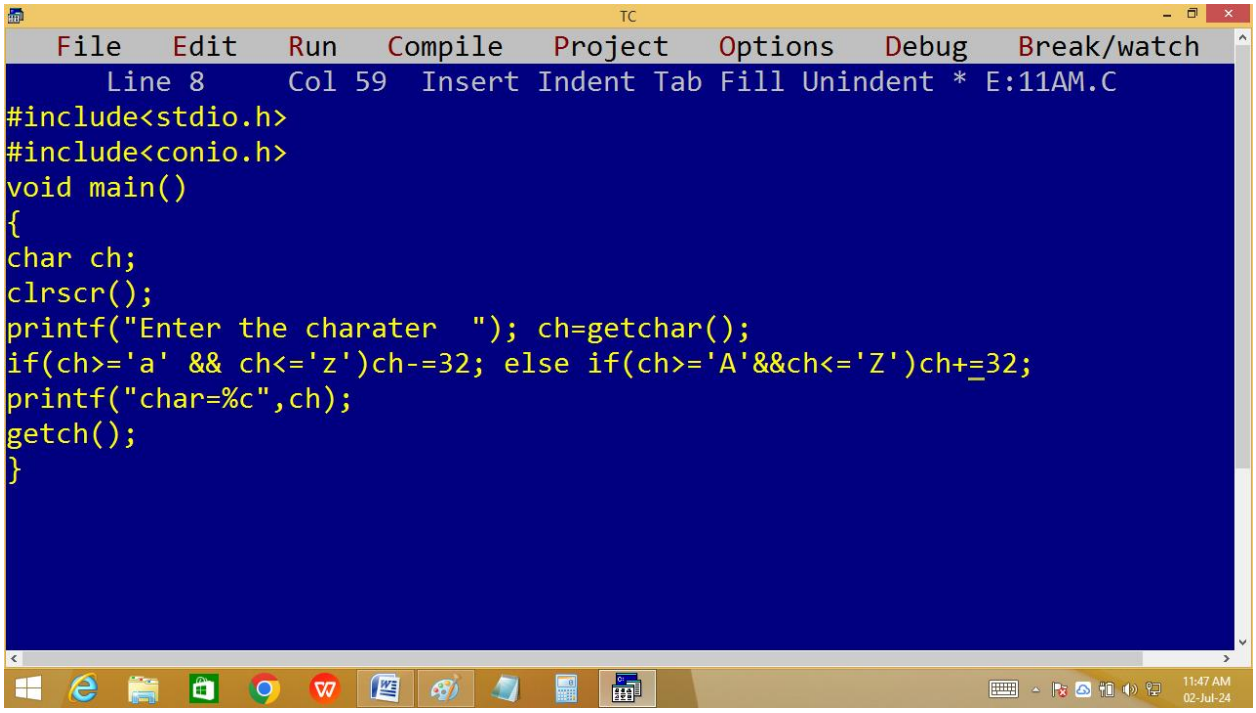

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 22 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
char ch;
clrscr();
printf("Enter the charater "); ch=getchar();
if(islower(ch)) ch = toupper(ch);
else ch=tolower(ch);
printf("char=%c",ch);
getch();
}

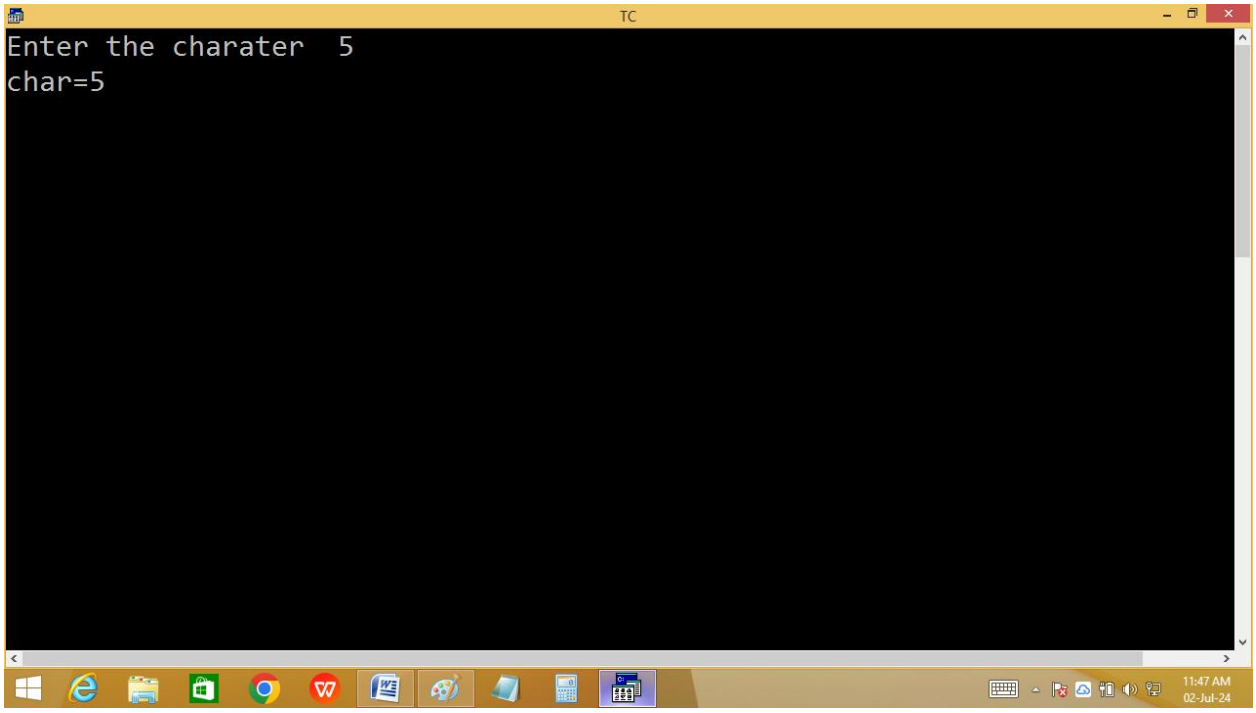

TC
Enter the charater H
char=h

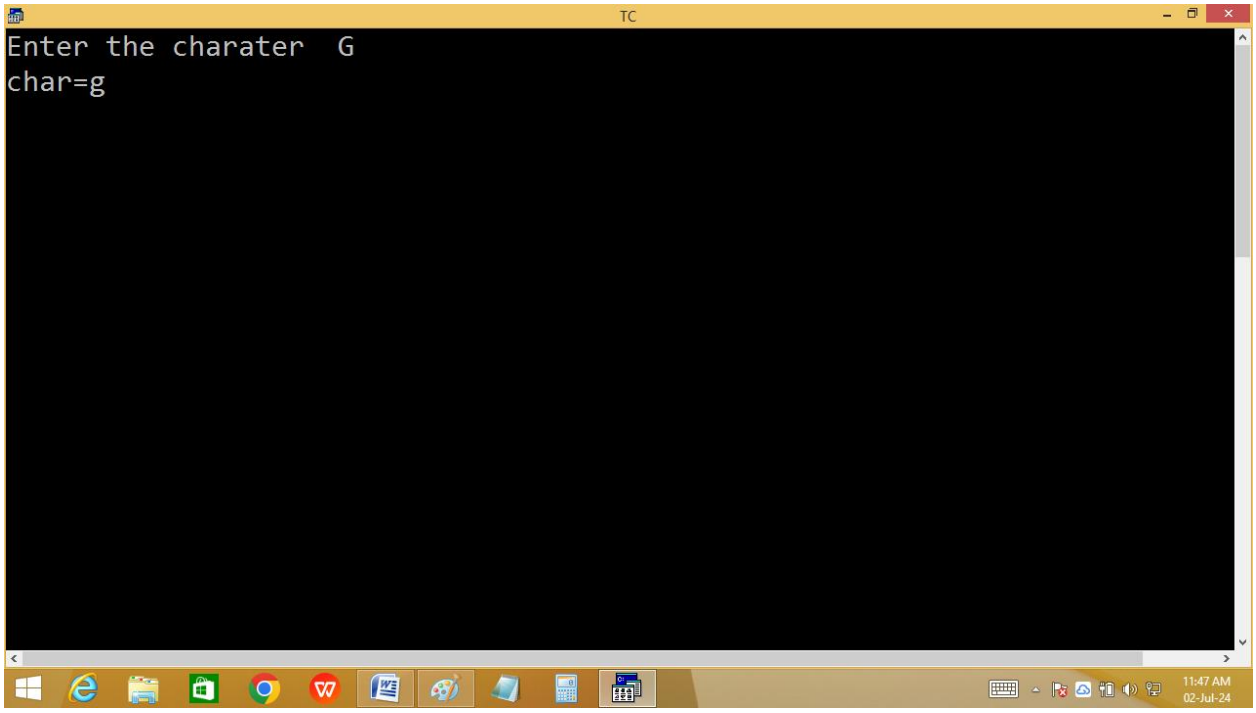


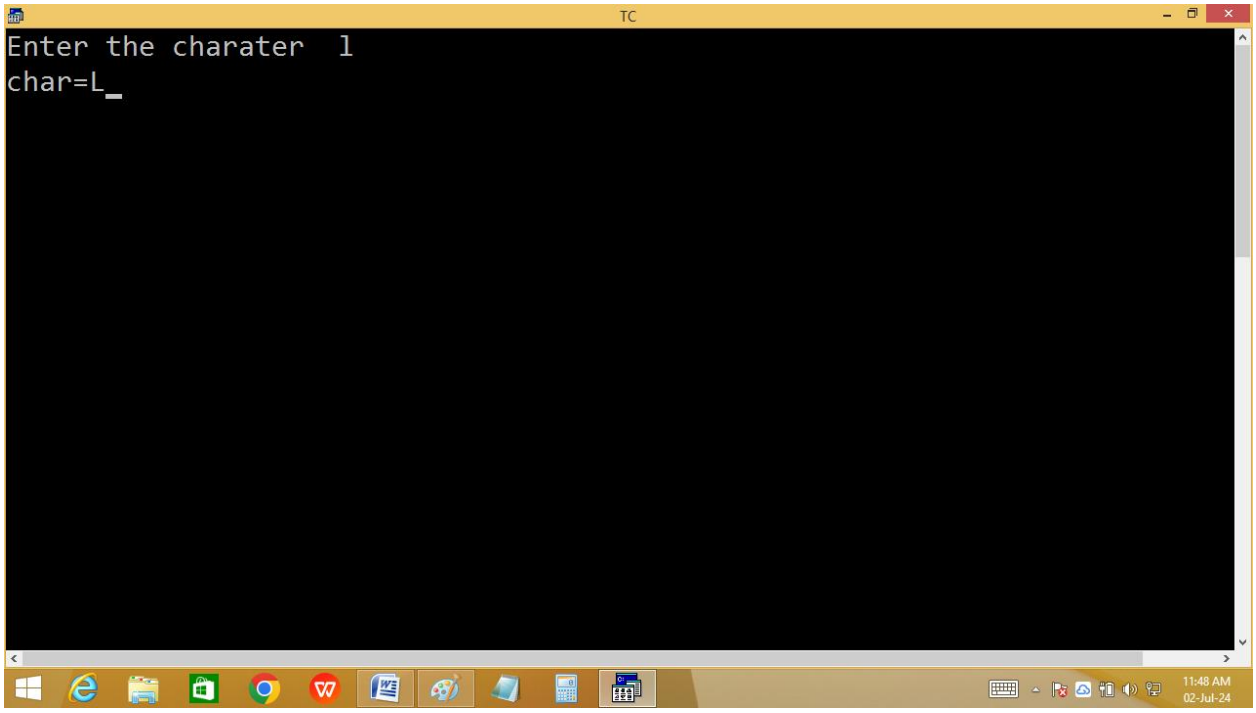




## Without using predefined functions:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 59 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter the charater "); ch=getchar();
if(ch>='a' && ch<='z')ch-=32; else if(ch>='A'&&ch<='Z')ch+=32;
printf("char=%c",ch);
getch();
}


TC
Enter the charater 5
char=5


TC
Enter the charater G
char=g
11:47 AM
02-Jul-24


TC
Enter the charater l
char=L
11:48 AM
02-Jul-24

# ELECTRICITY BILL GENERATION

## DOMESTIC SLAB SYSTEM

| UNITS | UNIT PRICE |
|---|---|
| 1-50 | 1.45 |
| 51-100 | 2.8 |
| 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

380 =50*1.45+50*2.8+100*3.05+100*4.75+80*6=1472.5

580=50*1.45+50*2.8+100*3.05+100*4.75+200*6+80*6.25=2692.5

```
#include<stdio.h>

#include<conio.h>
```

```
void main()
{
long serno, pre, cur, units;
char name[30];
float amt;
clrscr();
printf("Enter service no "); scanf("%ld",&serno);
fflush(stdin);
printf("Enter consumer name "); gets(name);
printf("Enter previous month reading ");
scanf("%ld",&pre);
current:
printf("Enter current  month reading ");
scanf("%ld",&cur);
if(cur<pre){puts("\aCheck current month reading");
goto current;}
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<65) amt=65;

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

getch();

}
```