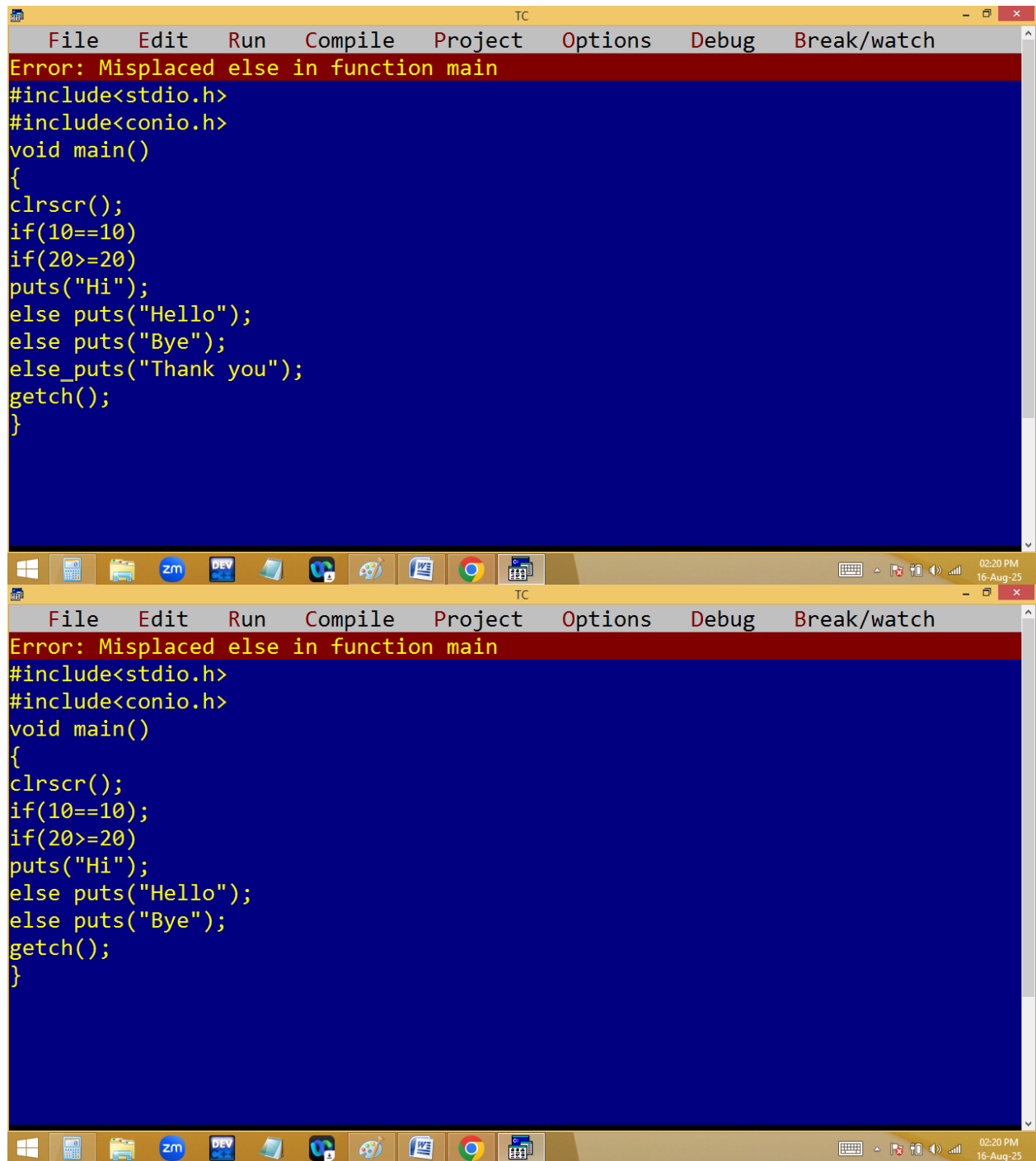
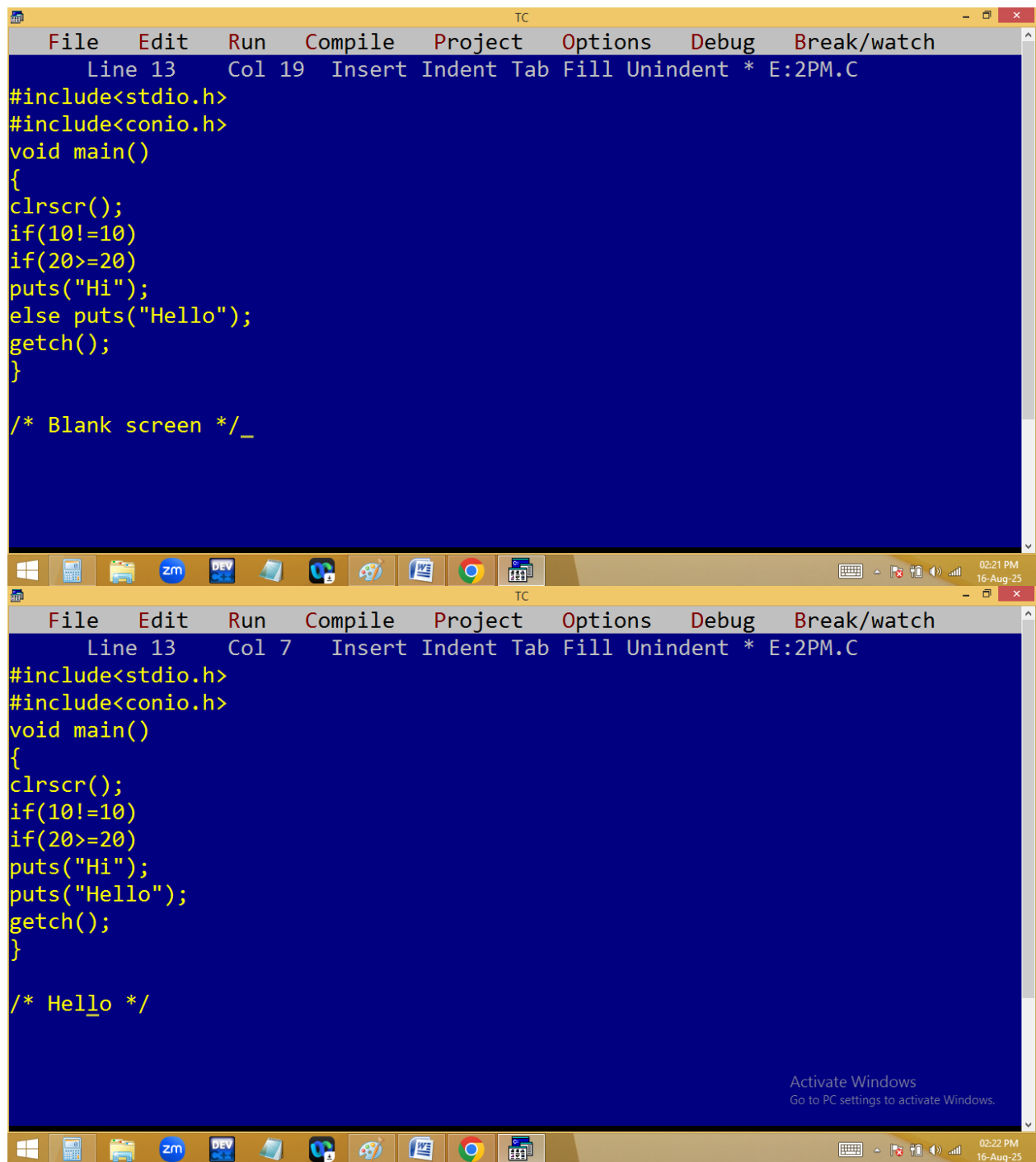


The image shows a screenshot of the Turbo C++ (TC) IDE. The top window is the source code editor, titled 'TC', showing a C program. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 10 Col 18 Insert Indent Tab Fill Unindent * E:2PM.C'. The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
if(10==10)
if(20>=20)
puts("Hi");
else puts("Hello");
else puts("Bye");_
getch();
}
```

The bottom window is the output console, also titled 'TC', which displays the output of the program: 'Hi'. The Windows taskbar at the bottom shows the time as 02:18 PM and 02:19 PM on 16-Aug-23, along with various system icons and application icons like zM, DEV, and Google Chrome.



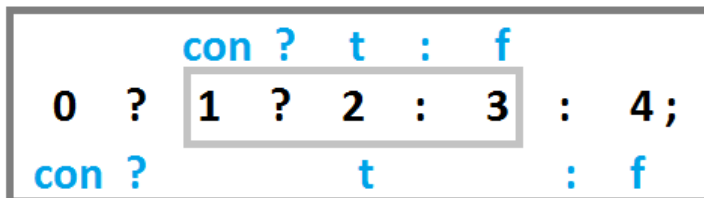


```

TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 12 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d\n", 0?1?2:3:4);
printf("%d\n", 1?0?2:3:4);
printf("%d\n", 1?2?0:3:4);
getch();
}

/* 4, 3, 0*/

```

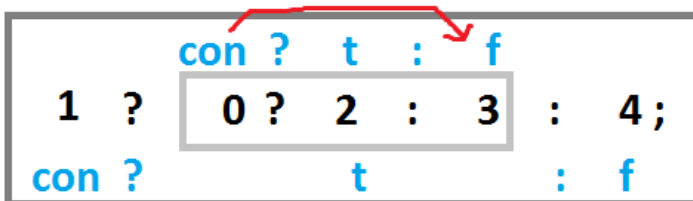


F

```

if( 0 )
{
    if( 1 ) p( 2 );
    else p( 3 );
}
else p( 4 );

```

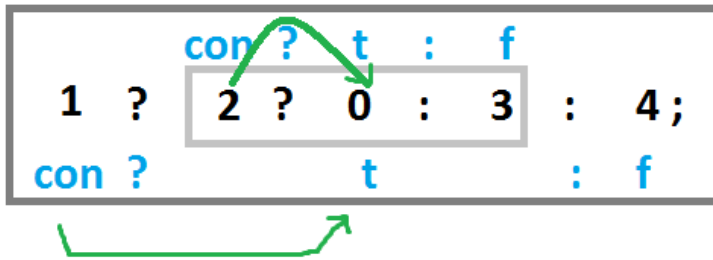


F

```

if( 1 )
{
    ↓ T
    if( 0 ) p( 2 );
    else p( 3 );
}
else p( 4 );

```



```

if( 1 )
{
  ↓
  if( 2 ) p( 0 );
  else p( 3 );
}
else p( 4 );

```

SWITCH STATEMENT

It is a selection statement.

It is used to execute one case of statements from no of cases according to the switch expression value matched with case expression value. In switch the program is jumped to matching case like the go to label.

It is similar to ladder if in working style.

Switch performance is high when compared with ladder if because of it jumps to matching case.

Syntax:

```
switch(condition / expression)
```

```
{
```

```
case constexp1:
```

```
statements;
```

```
break;
```

```
case constexp2:
```

```
statements;
```

```
break;
```

```
case constexpN:
```

```
statements;
```

break;

[default: statements;]

}

Here switch, case, break, default are the keywords.

In between case and case expression / value at least one space should be provided. Otherwise it will become a label.

case expression/value should be a constant integer/char value. i.e. float / string not allowed.

One case contains one expression only.

case expression doesn't contain any separators like , . etc.

case expression should be end with : (colon)

Each case should be separated with break keyword. Otherwise remaining cases also executed.

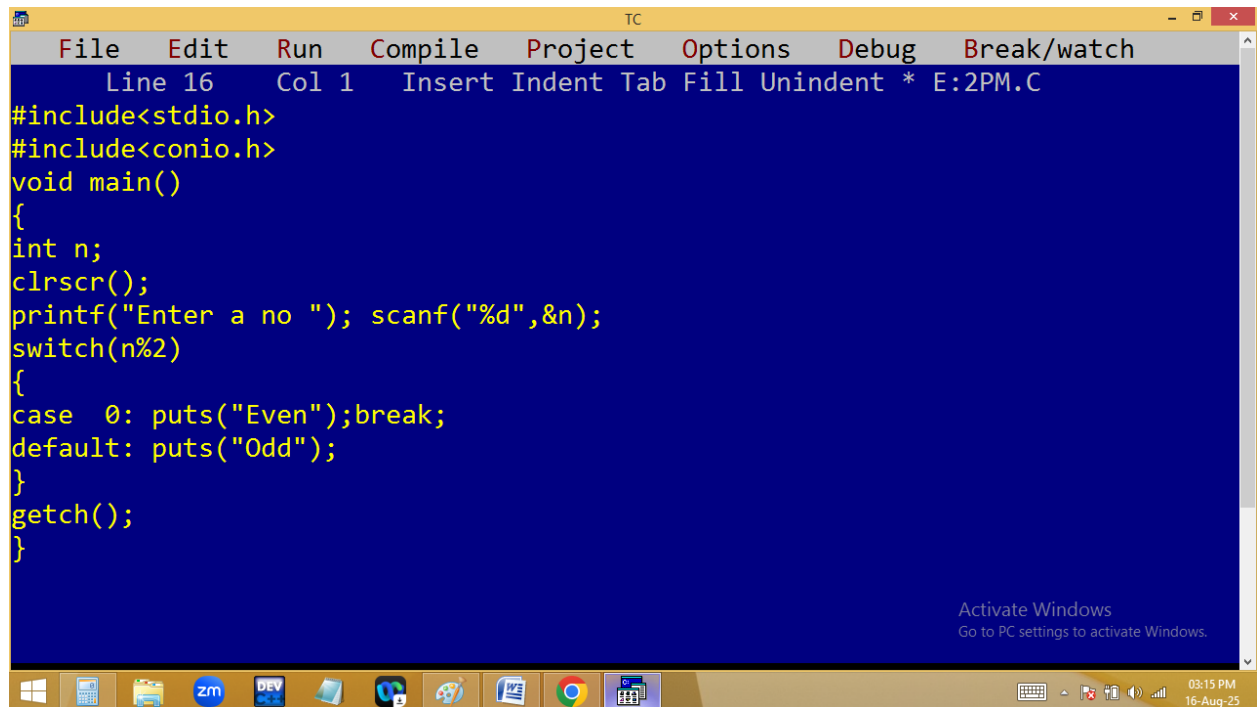
Duplicate cases not allowed.

default is similar to the else and all cases are failed then default statements are executed. Default is optional and we can declare it anywhere in our switch.

Outside case expressions not considered in switch.

- 1. Case value should be a const int.**
- 2. Variables not allowed in case.**
- 3. Float / string not allowed.**
- 4. Duplicate cases not allowed.**
- 5. Case and case value have to be separated with at least one space.**
- 6. If space not provided then it is converted into a label.**
- 7. Every case should be ended with :**
- 8. Break is optional and when it is not there, remaining case also executed until the next break is occurred.**
- 9. Case doesn't allow range of values.**
- 10. Case doesn't allow , . like separators,**
- 11. Default is optional and working similar to else. We can declare default anywhere.**
- 12. Switch, case, break and default are the keywords.**

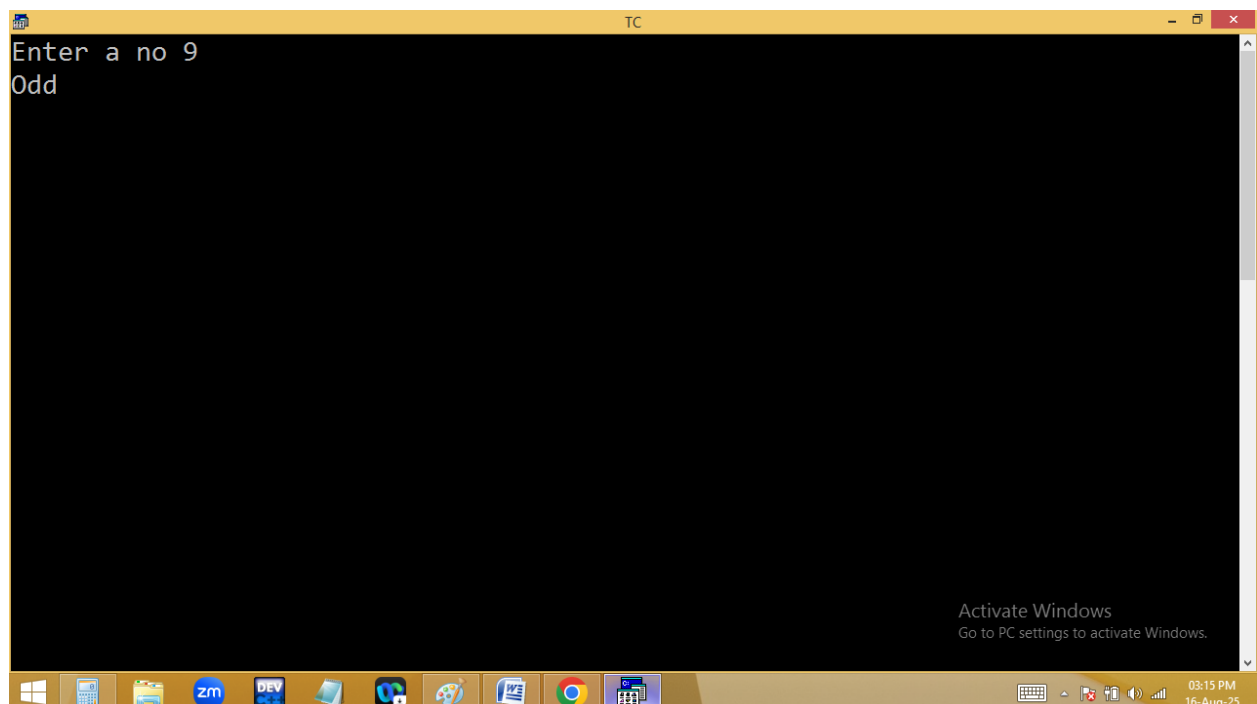
Finding even/odd using switch:



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 16 Col 1 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);
switch(n%2)
{
case 0: puts("Even");break;
default: puts("Odd");
}
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.

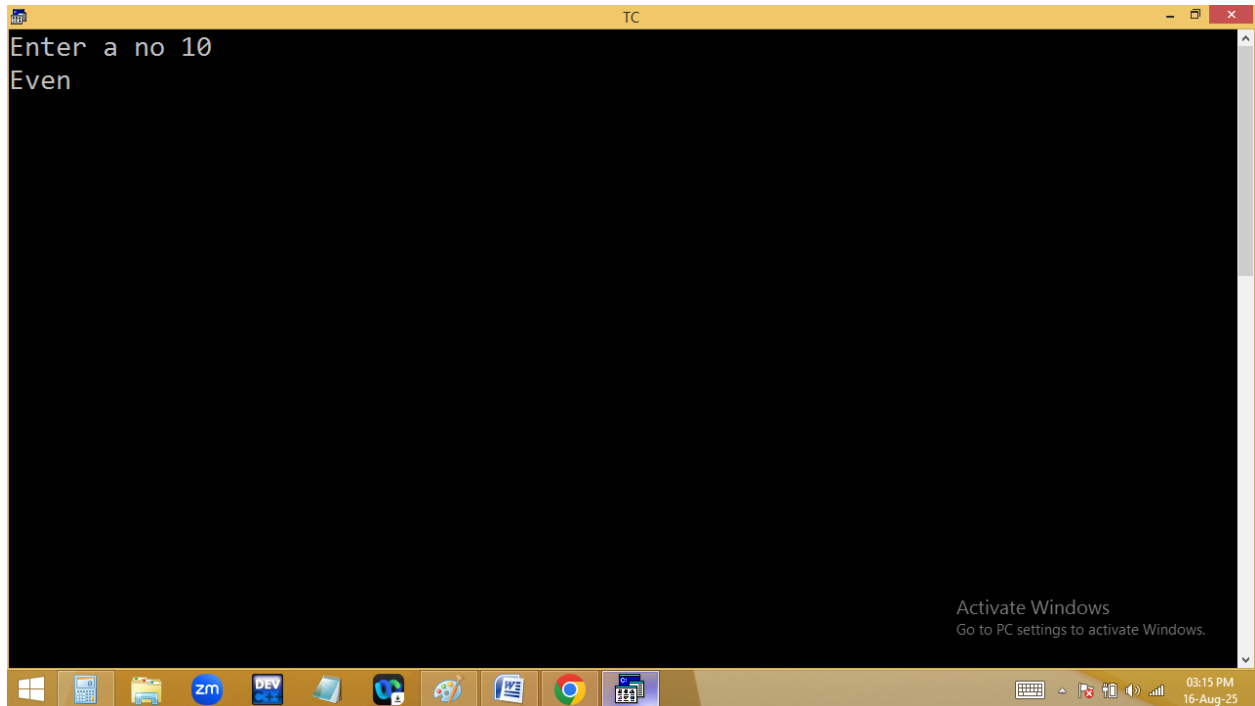
03:15 PM
16-Aug-25



```
TC
Enter a no 9
Odd
```

Activate Windows
Go to PC settings to activate Windows.

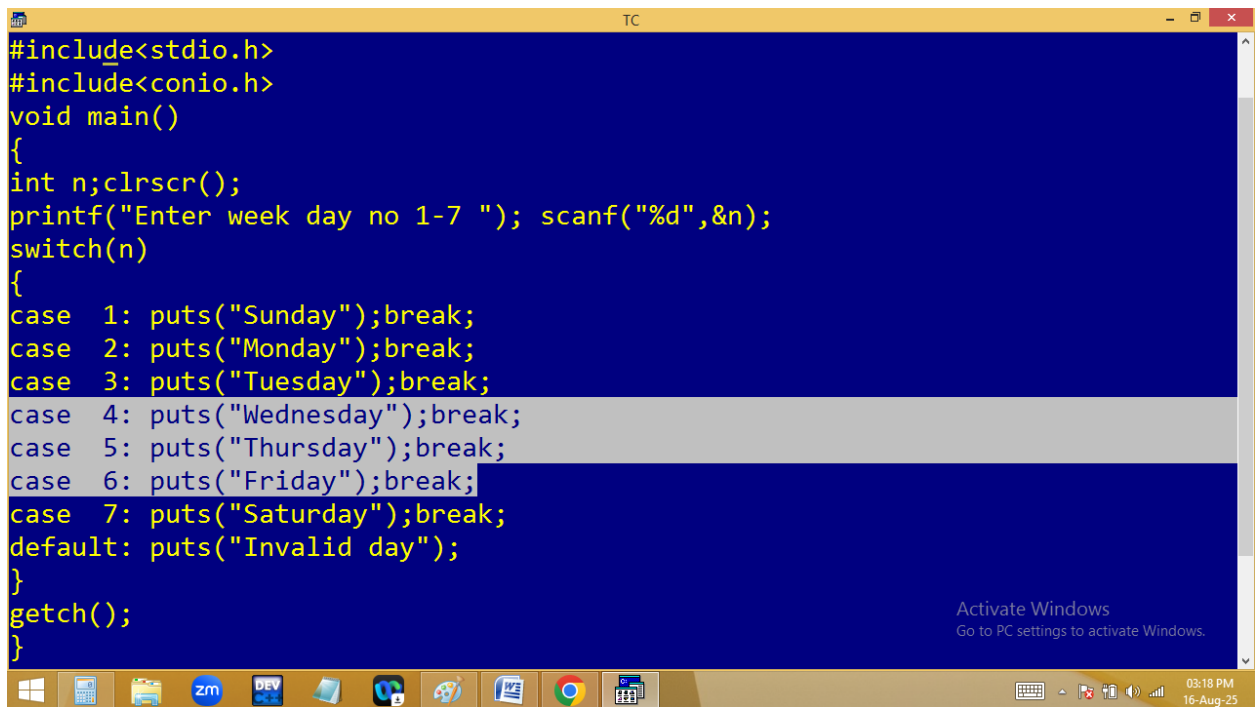
03:15 PM
16-Aug-25



```
Enter a no 10
Even
```

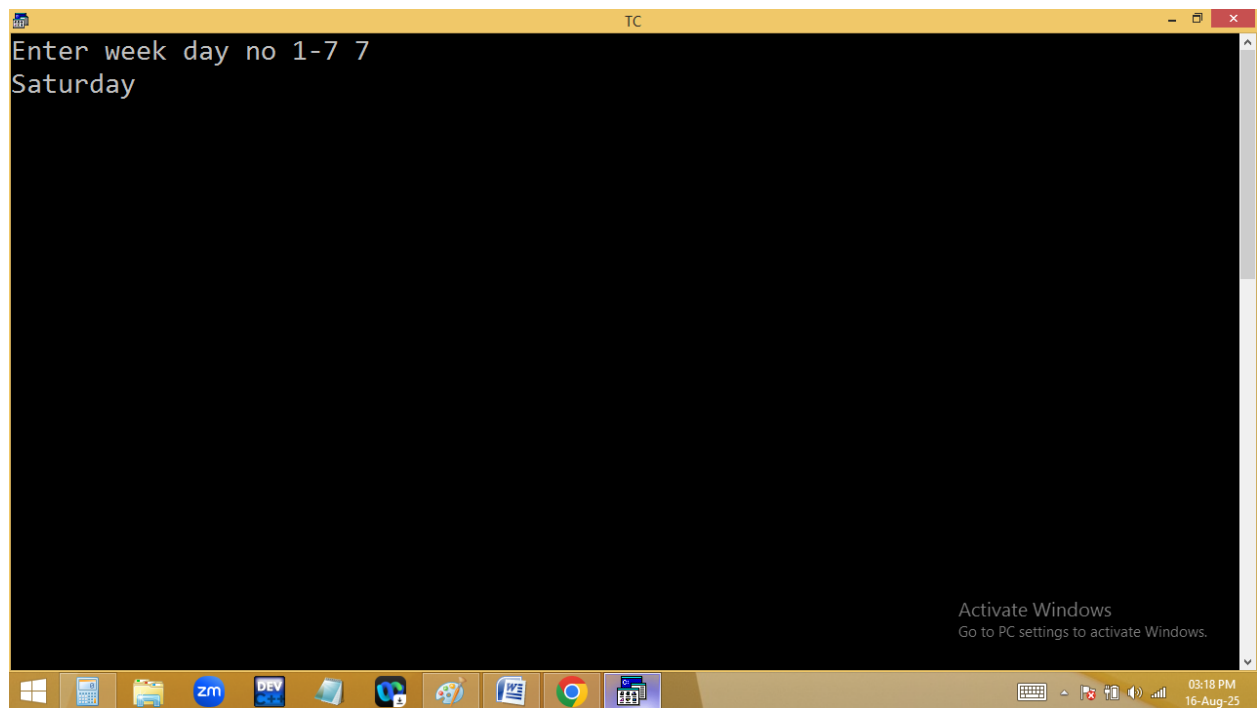
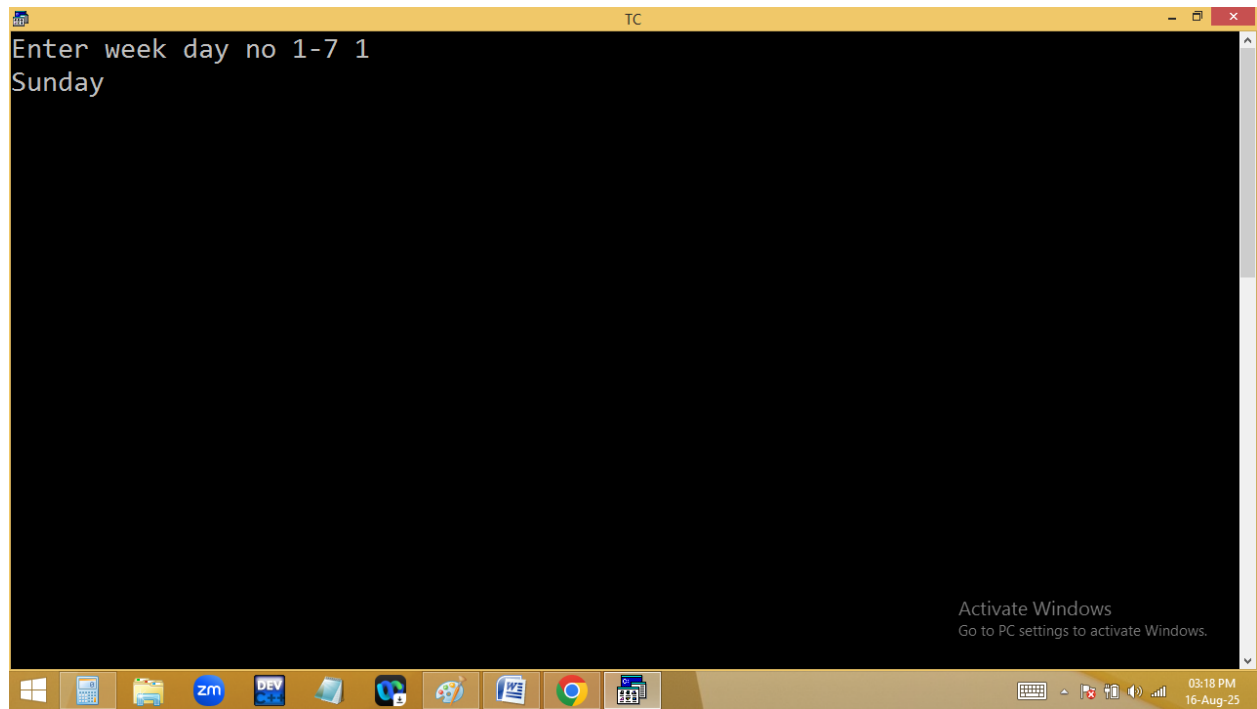
Activate Windows
Go to PC settings to activate Windows.

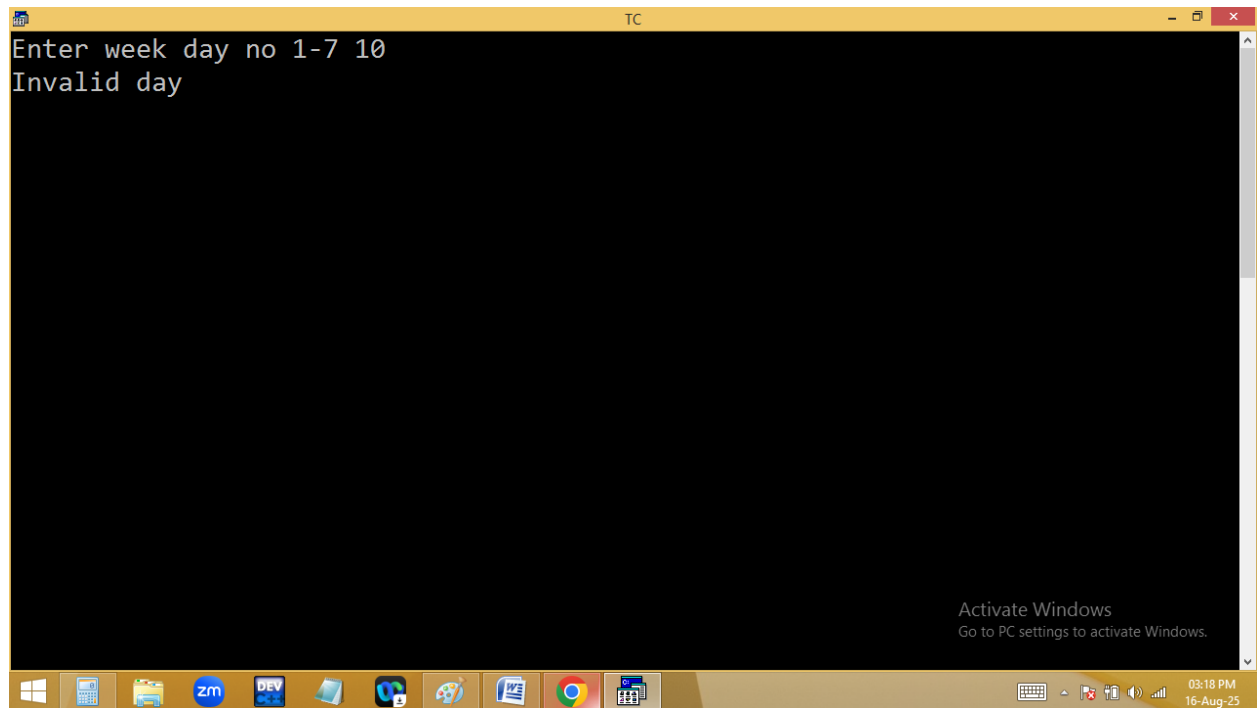
Finding week day name:



```
#include<stdio.h>
#include<conio.h>
void main()
{
int n; clrscr();
printf("Enter week day no 1-7 "); scanf("%d",&n);
switch(n)
{
case 1: puts("Sunday");break;
case 2: puts("Monday");break;
case 3: puts("Tuesday");break;
case 4: puts("Wednesday");break;
case 5: puts("Thursday");break;
case 6: puts("Friday");break;
case 7: puts("Saturday");break;
default: puts("Invalid day");
}
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.





Read a character and find out it is vowel/consonant using switch?

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a character "); scanf("%c",&ch);
if(ch>='A'&&ch<='Z')ch+=32;
if(ch>='a'&&ch<='z')
{
switch(ch)
{
case 'a': case 'e': case 'i': case 'o': case 'u': puts("Vowel");break;
default : puts("Consonant");
}
}
else puts("It is not an alphabet");
getch();
}
```

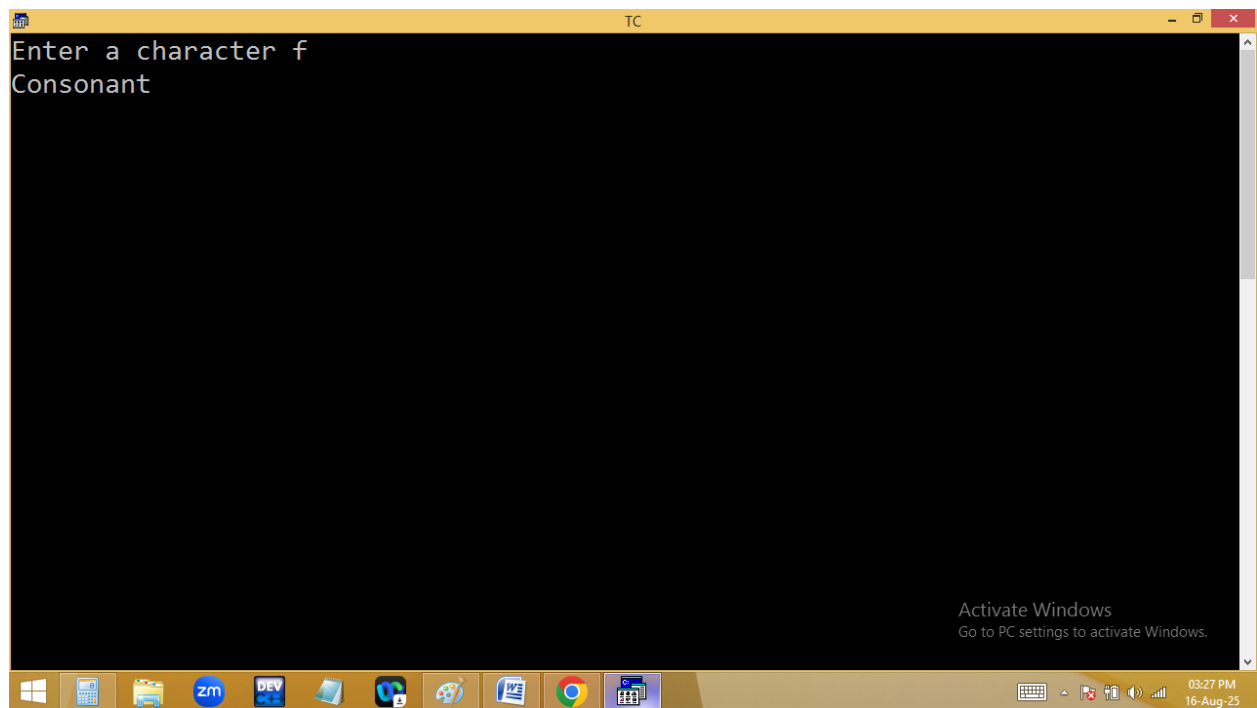
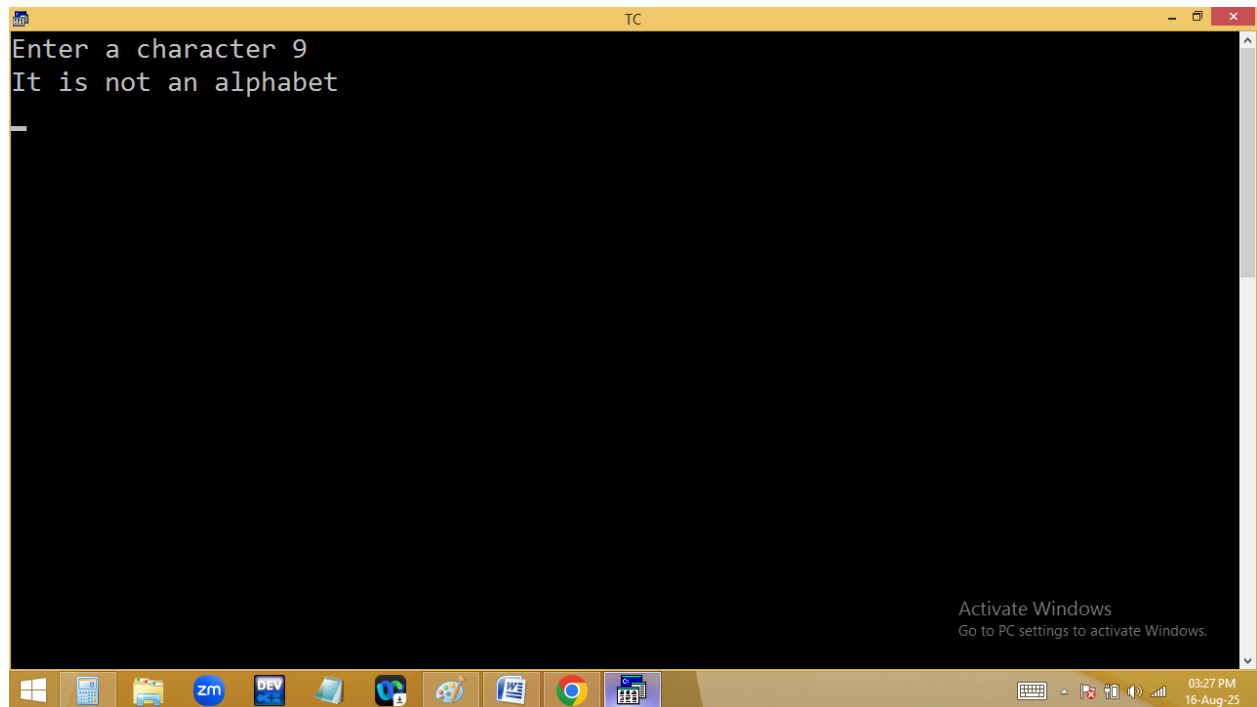
Activate Windows
Go to PC settings to activate Windows.

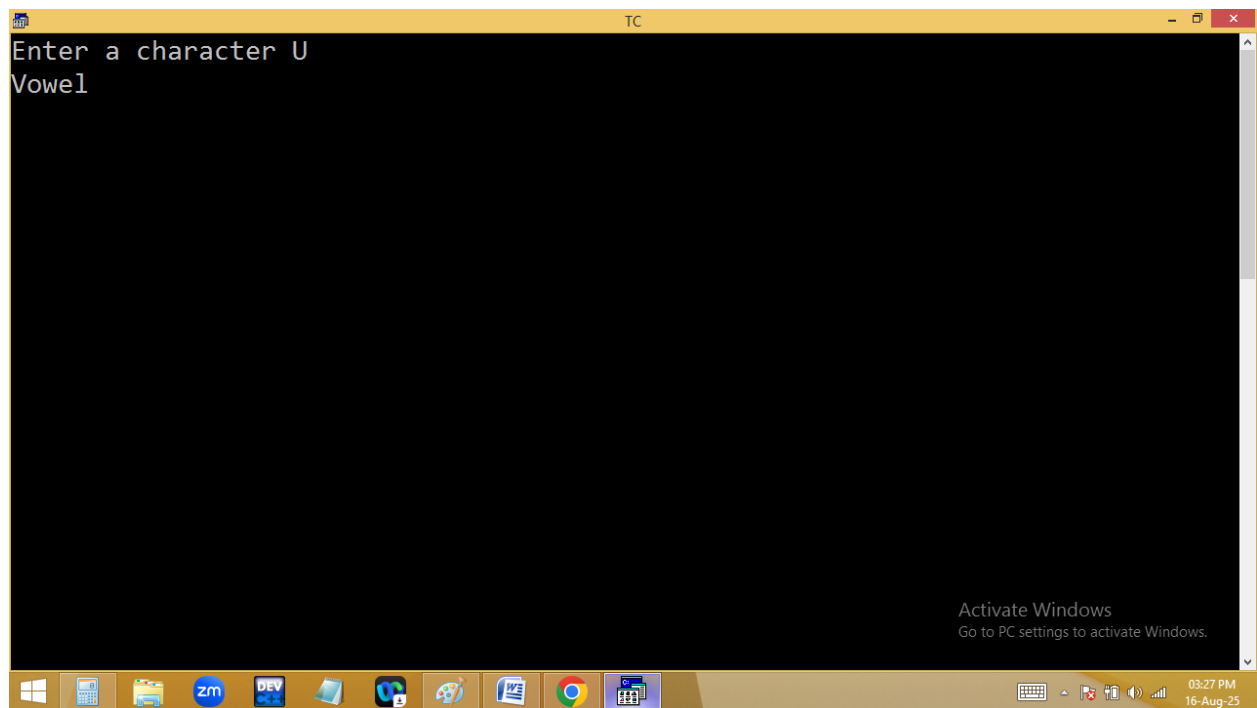
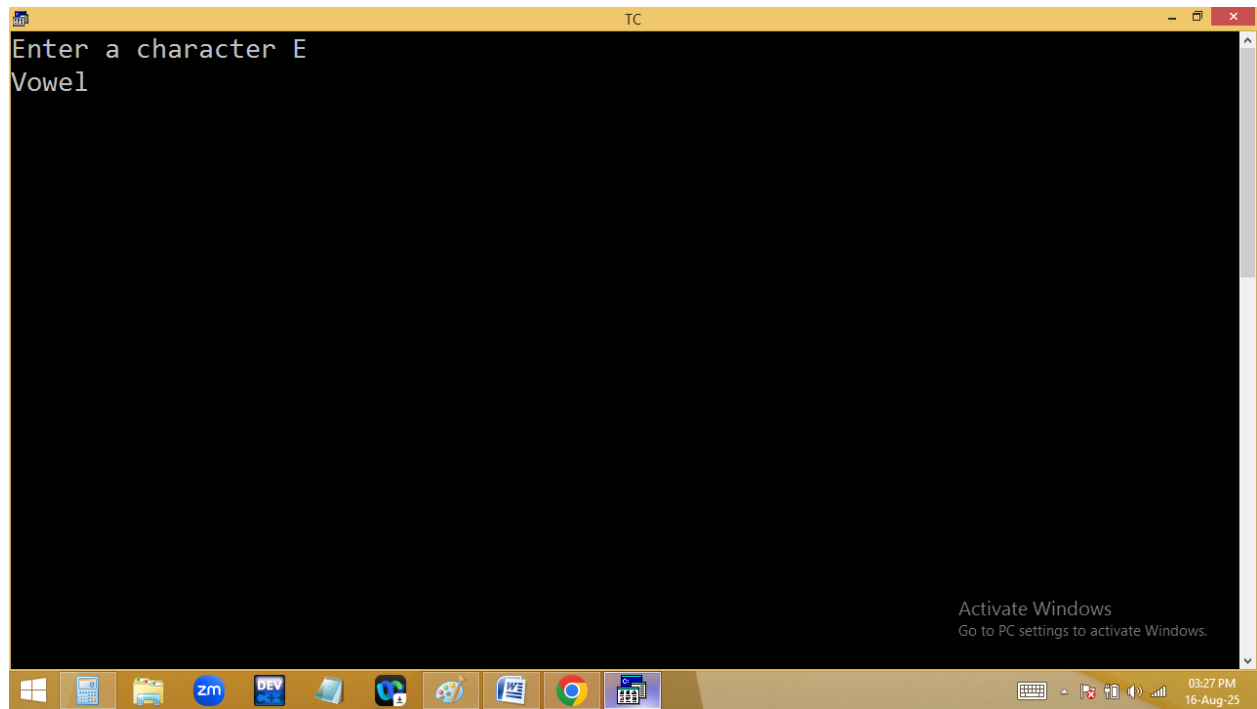
03:26 PM
16-Aug-25

```
TC
Enter a character *
It is not an alphabet
```

Activate Windows
Go to PC settings to activate Windows.

03:26 PM
16-Aug-25





```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
char ch; clrscr();
printf("Enter a character "); scanf("%c",&ch);
if(ch>='A'&&ch<='Z')ch+=32;
if(ch>='a'&&ch<='z')
{
switch(ch)
{
case 'a': case 'e': case 'i': case 'o': case 'u': puts("Vowel");break;
default : puts("Consonant");
}
}
else if(ch>='0'&& ch<='9')puts("It is a digit");
else puts("It is a special char");
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.

03:28 PM
16-Aug-25

```
TC
Enter a character *
It is a special char
```

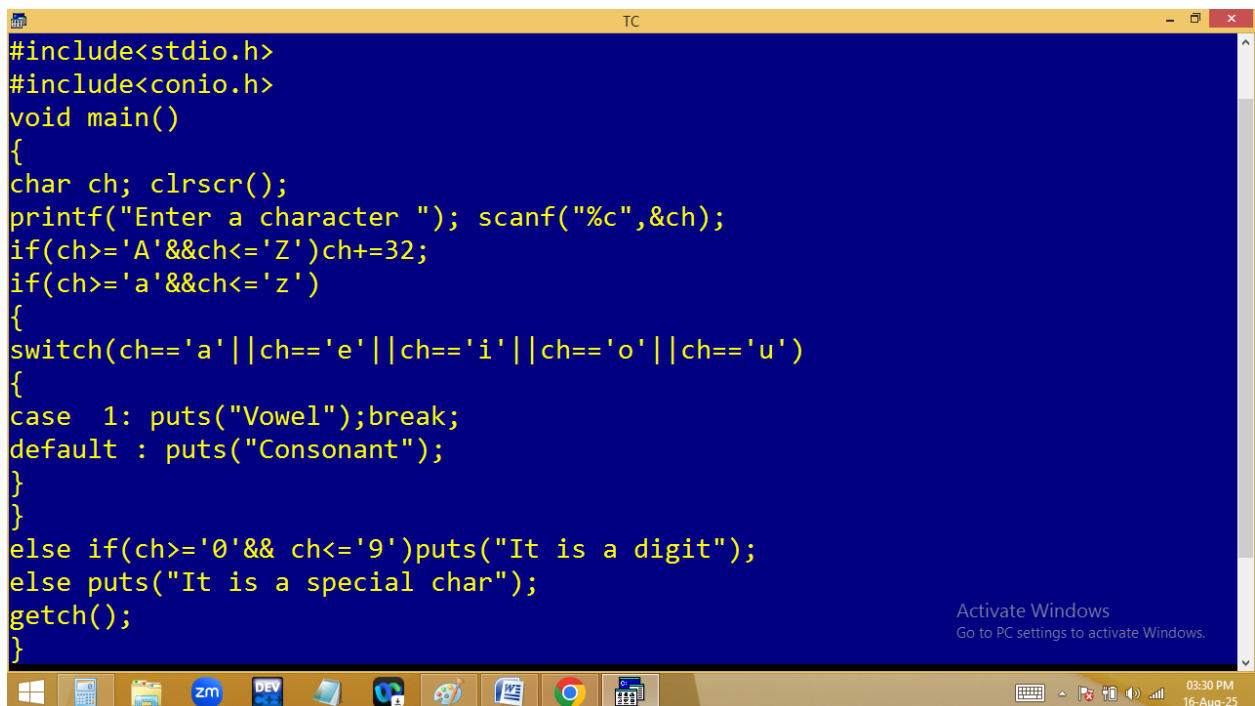
Activate Windows
Go to PC settings to activate Windows.

03:28 PM
16-Aug-25



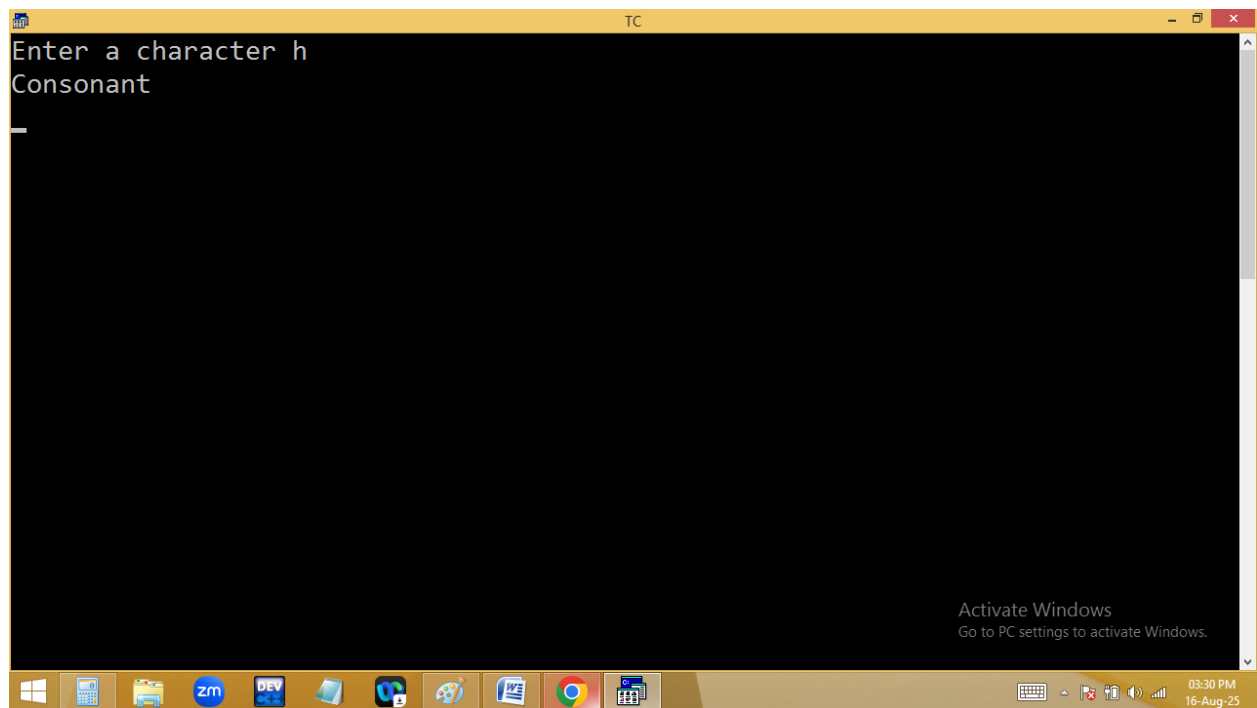
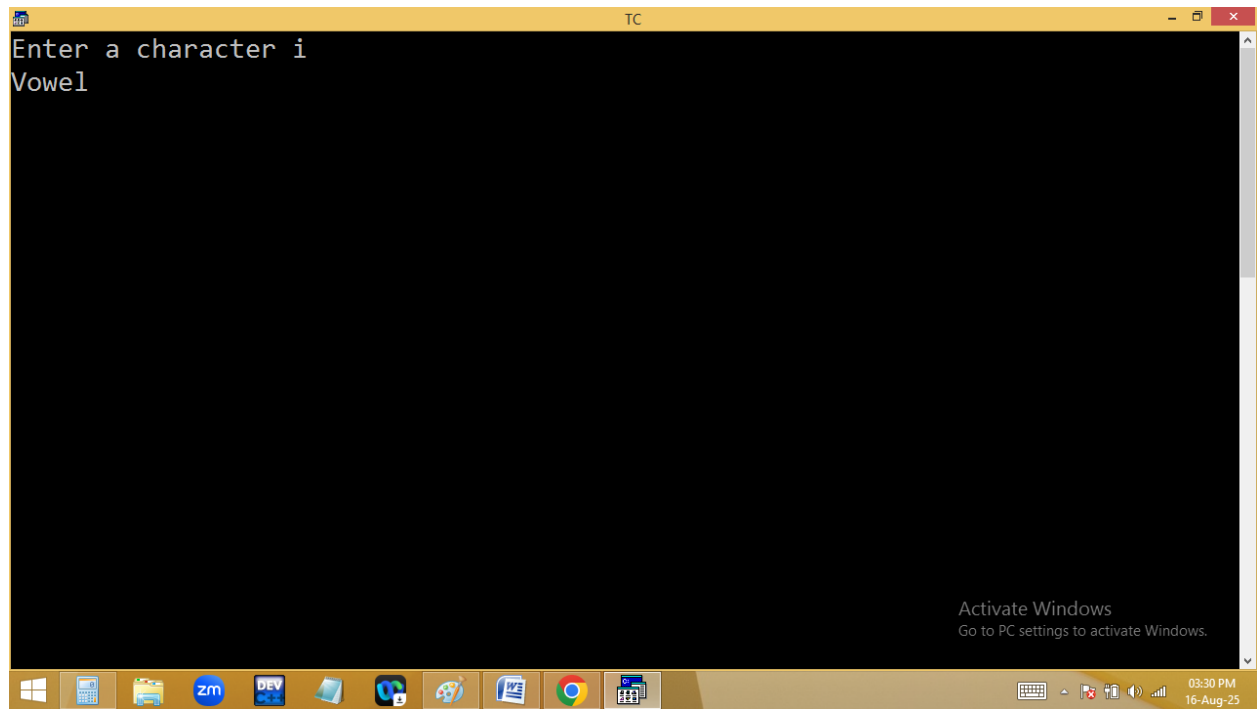
```
Enter a character i
Vowel
```

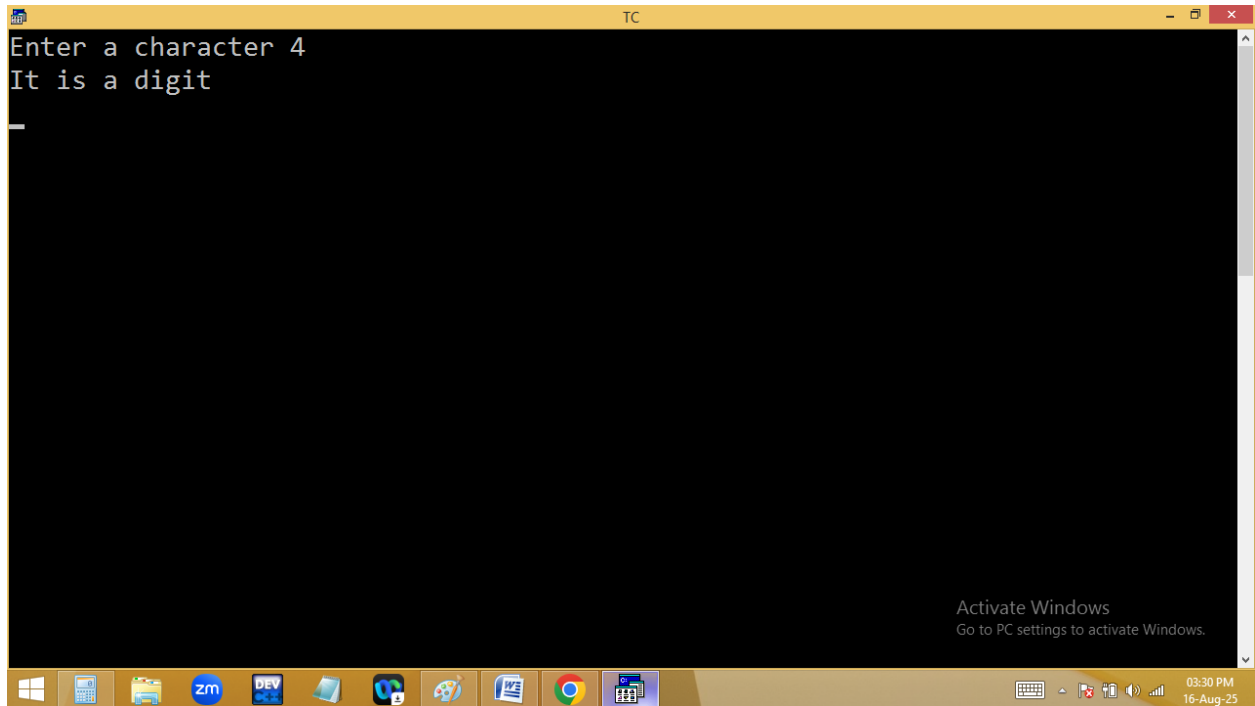
Activate Windows
Go to PC settings to activate Windows.



```
#include<stdio.h>
#include<conio.h>
void main()
{
char ch; clrscr();
printf("Enter a character "); scanf("%c",&ch);
if(ch>='A'&&ch<='Z')ch+=32;
if(ch>='a'&&ch<='z')
{
switch(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u')
{
case 1: puts("Vowel");break;
default : puts("Consonant");
}
}
else if(ch>='0'&& ch<='9')puts("It is a digit");
else puts("It is a special char");
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.





Home work:

HOTEL SAI BALAJI AMEERPET - HYD	
M E N U	
<ul style="list-style-type: none">1. Tea - 10/-2. Coffee/Milk/Boost/Lemon Tea/Water bottle-20/-3. Idly / dosa / upma / poha / bonda - 30/-4. Sambar idly / wada / onion / masala / poori - 40/-5. Veg biryani / Paneer dosa / Sambar wada / curd rice - 506. Bill7. Cancel8. Close	
Enter ur choice [2]	
Enter how many ? 1	Ur bill is 20/-

