printf():

It is the major output function in C.

It is a predefined function available in stdio.h

Printf always refer standard output device i.e. monitor.

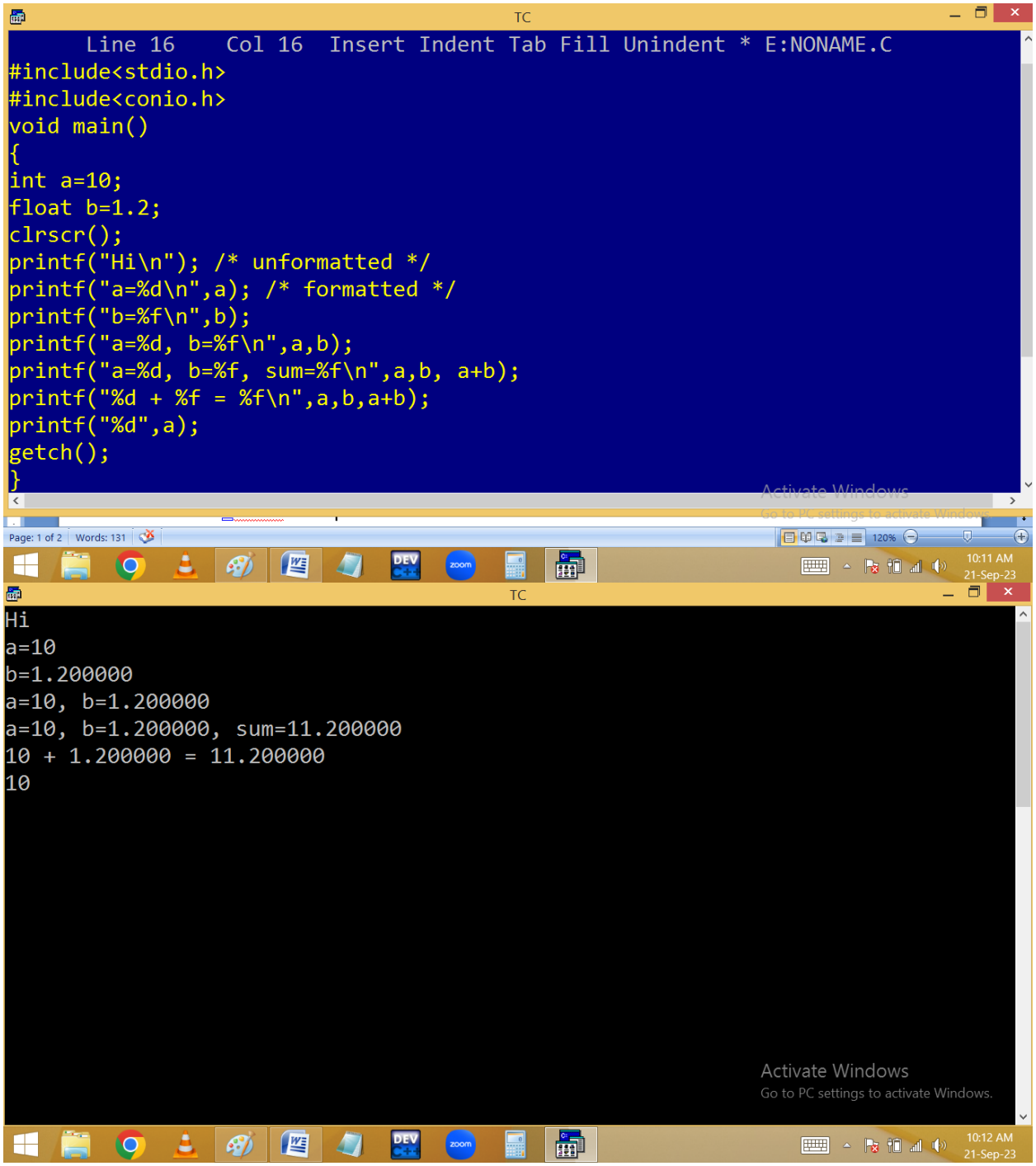
In printf, f means formatted

Syntax:

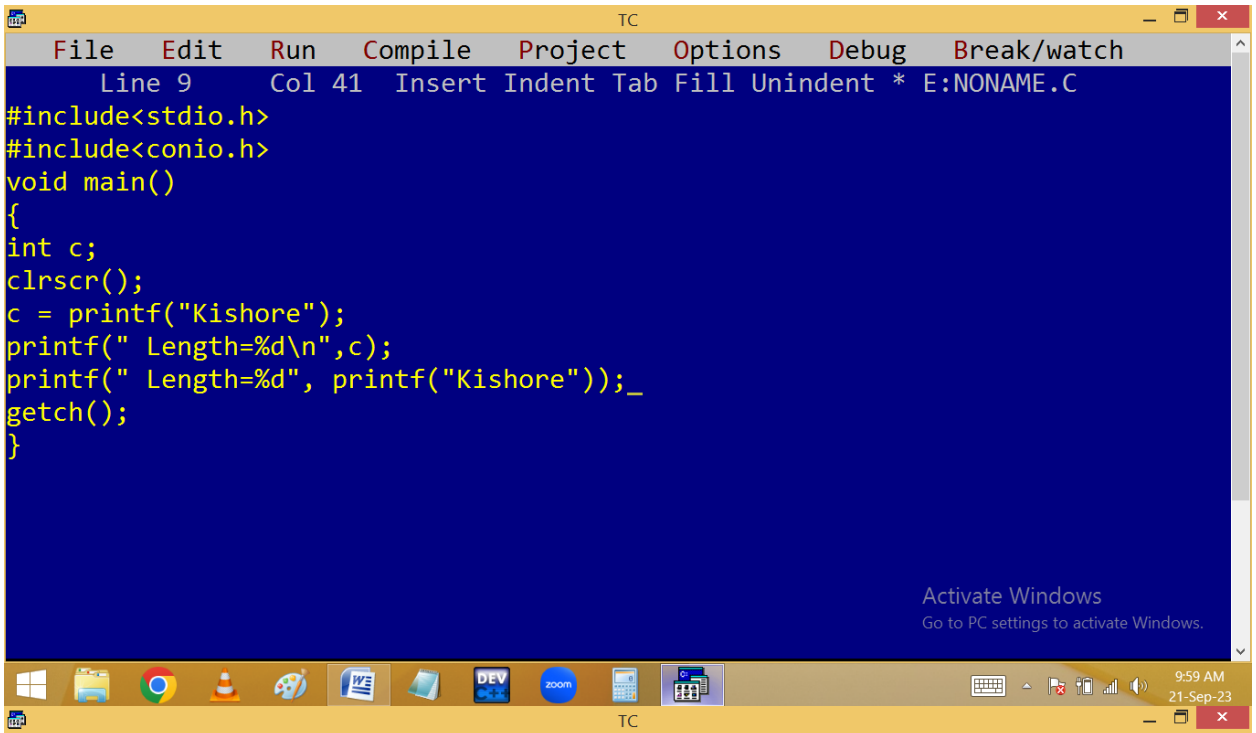
int printf(" [text] [conversion char / format specifiers] " [, variables] [, expressions]);

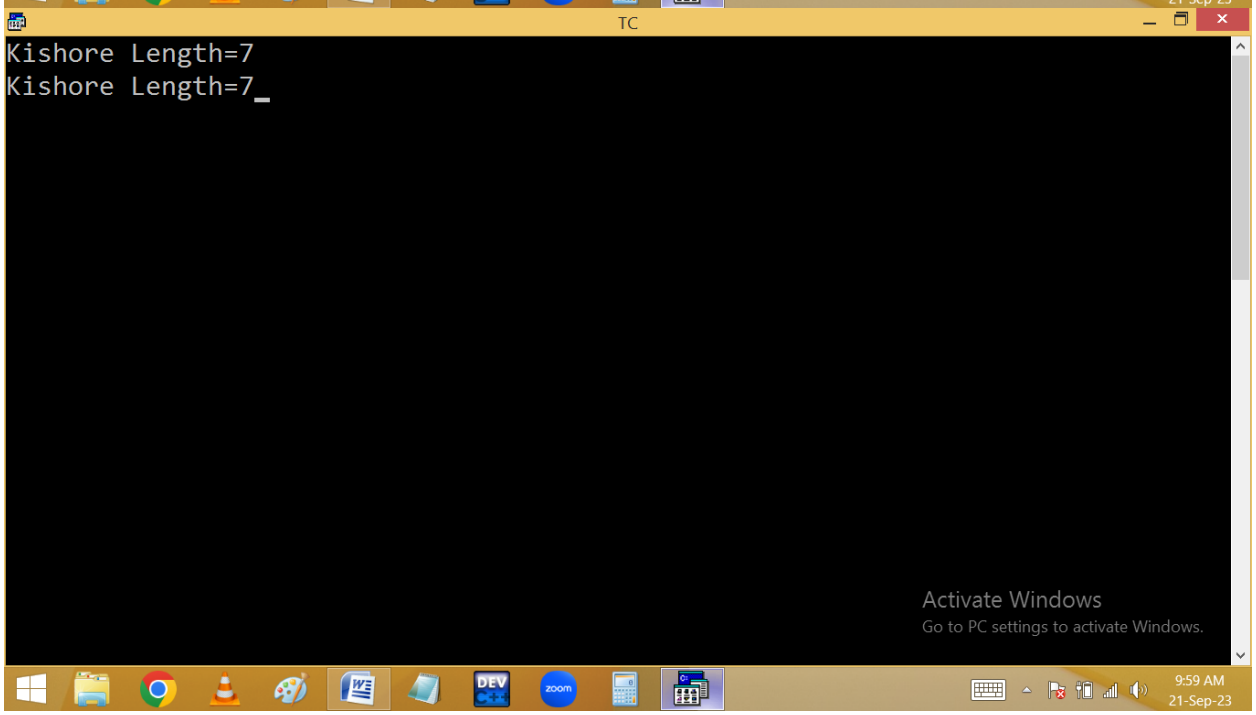
Note:

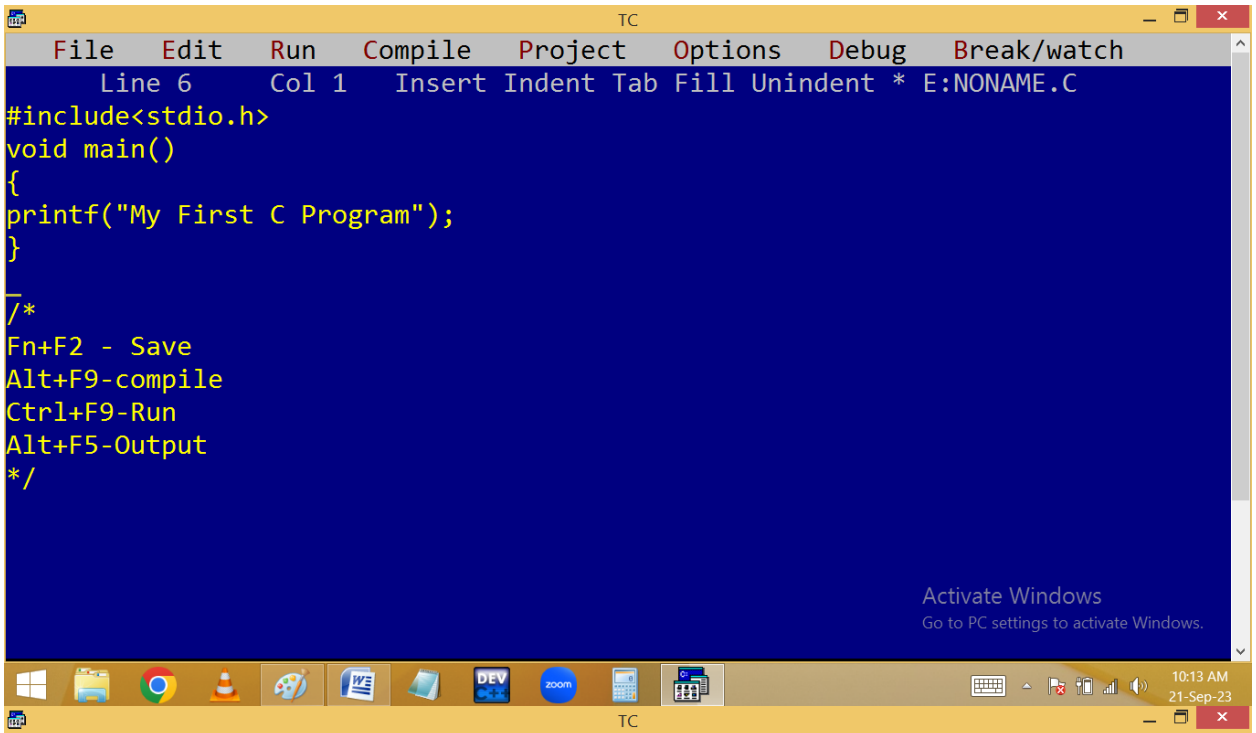
1. Printf always return int that indicates the no of visible characters in " ".
2. In printf the first arguments should be within " "
3. In printf everything printed as it is except conversion characters and back slash characters.
4. Printf can perform both formatted and unformatted outputs.
5. In printf execution order is right to left and printing is left to right.

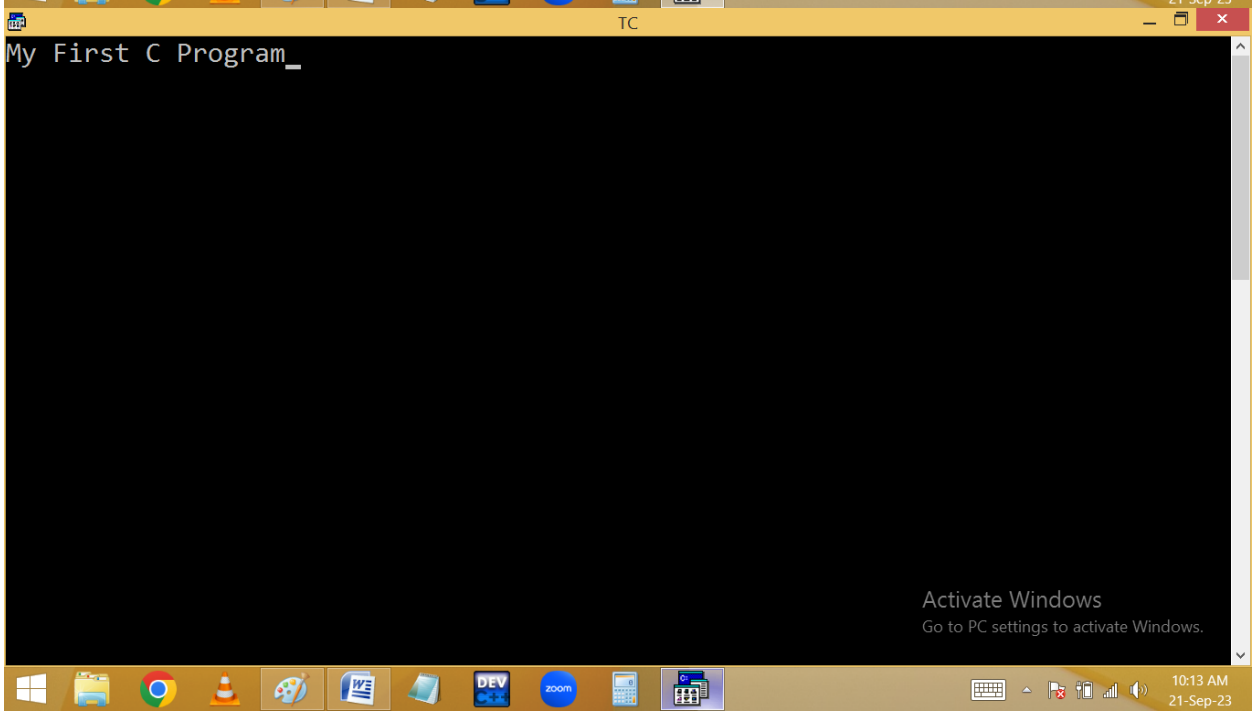


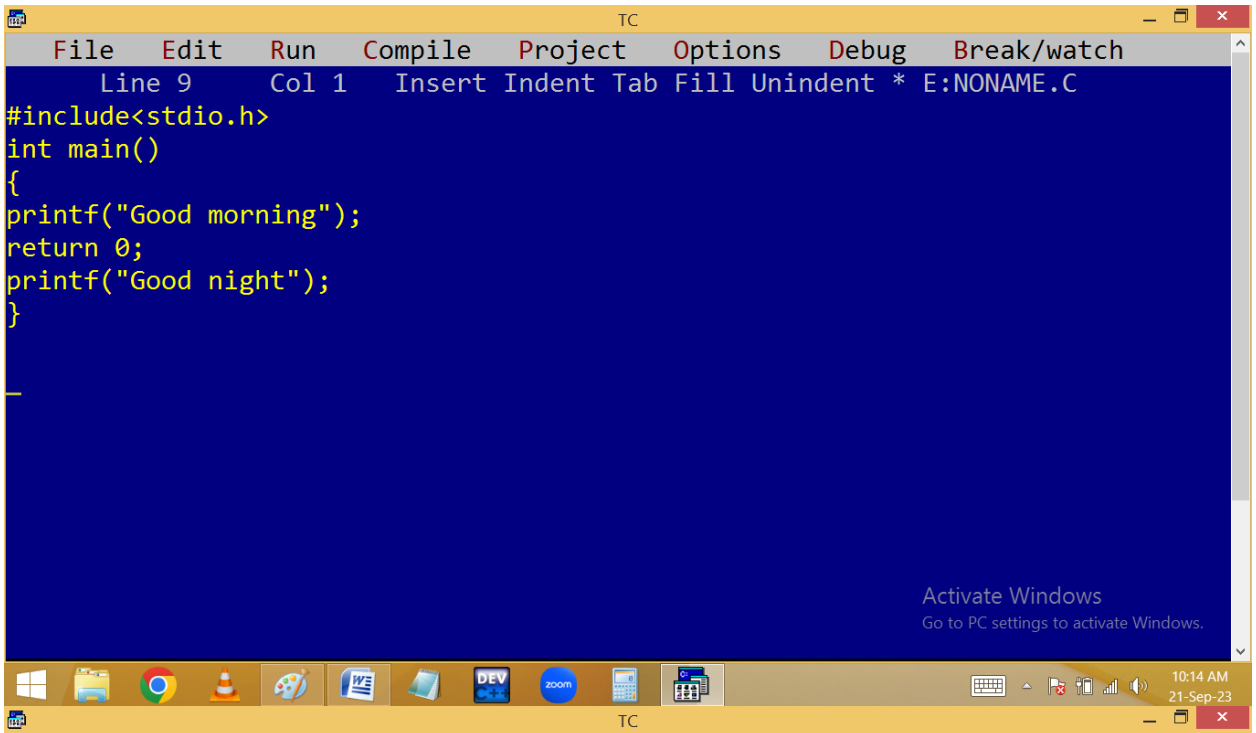
write a program to find a string length without using strlen() / loop.

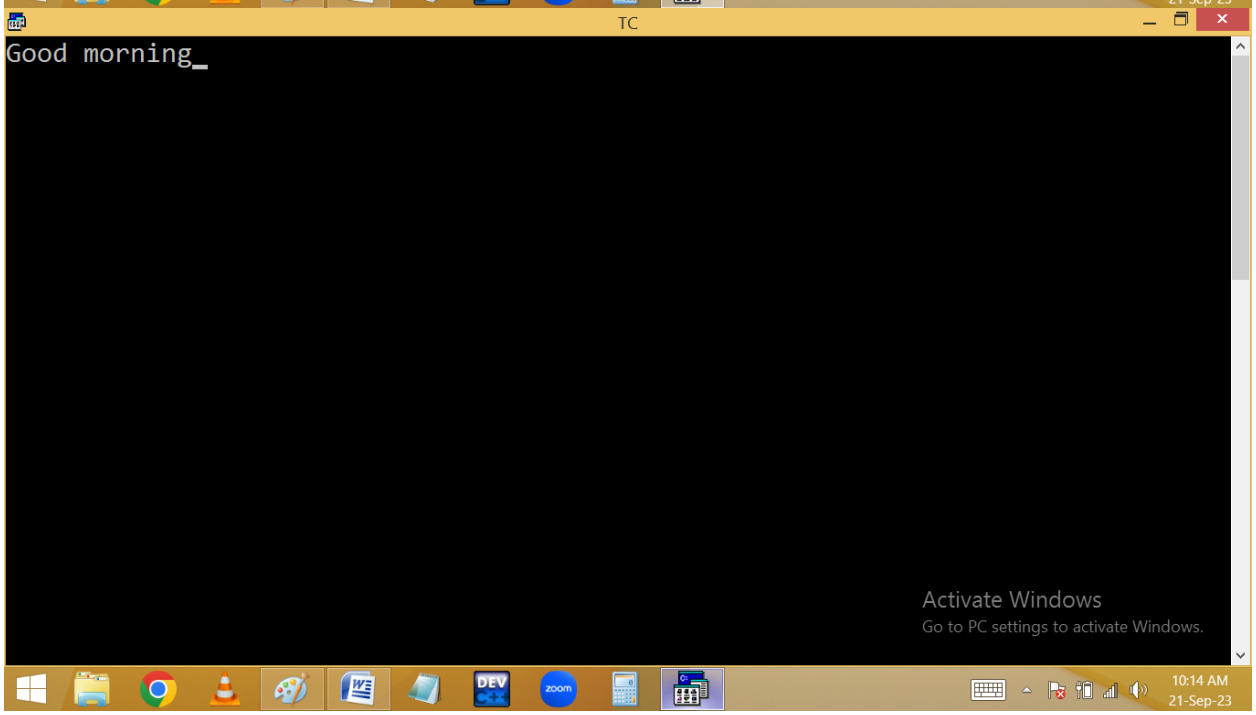

TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 41 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int c;
clrscr();
c = printf("Kishore");
printf(" Length=%d\n",c);
printf(" Length=%d", printf("Kishore"));
getch();
}
Activate Windows
Go to PC settings to activate Windows.
9:59 AM
21-Sep-23

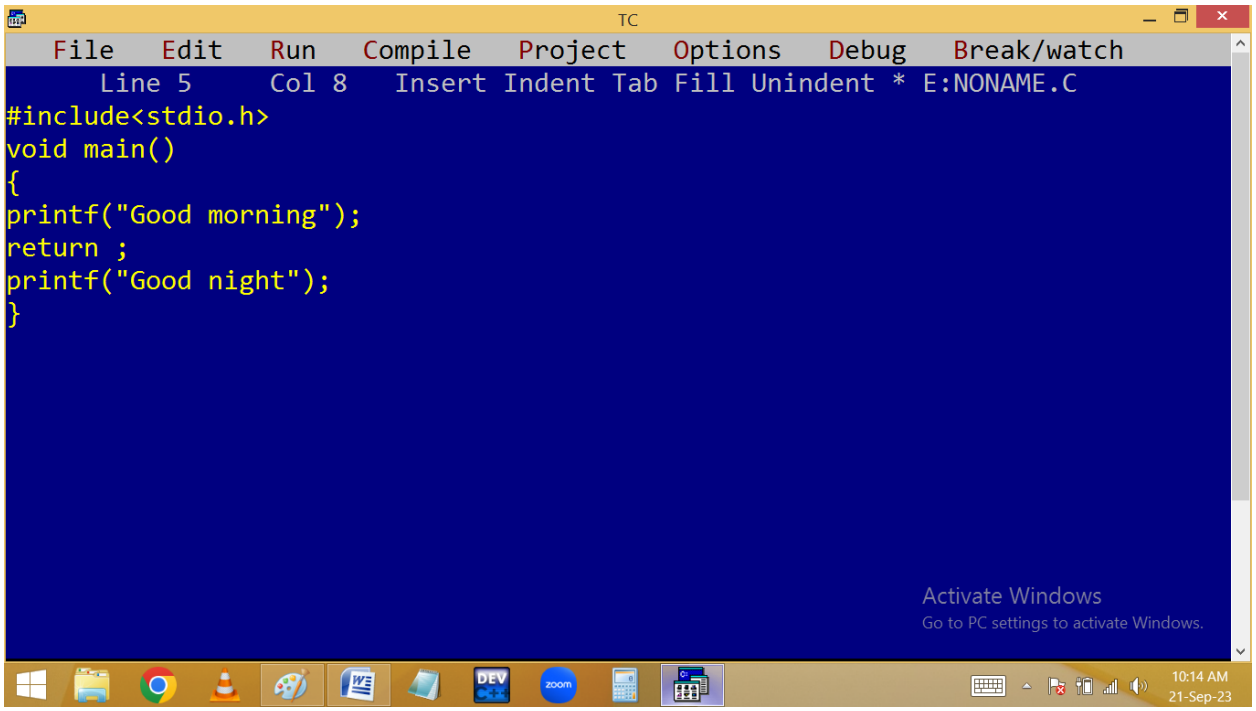

TC
Kishore Length=7
Kishore Length=7
Activate Windows
Go to PC settings to activate Windows.
9:59 AM
21-Sep-23

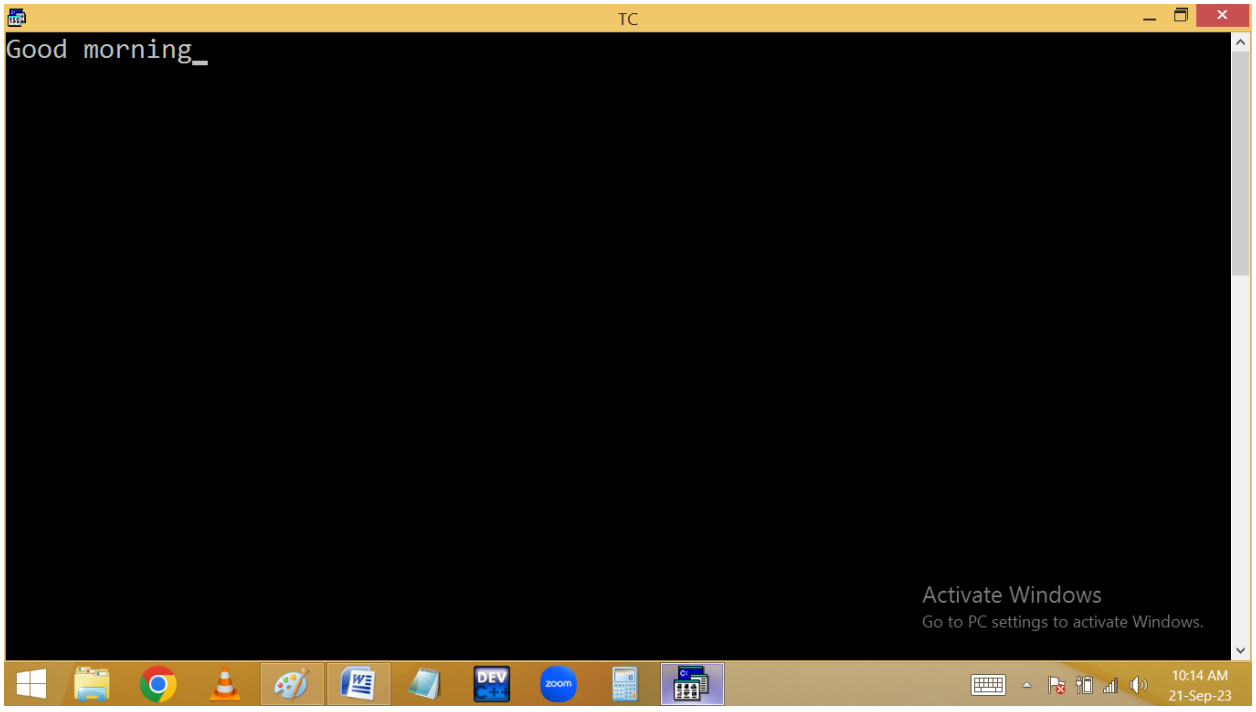

TC
File Edit Run Compile Project Options Debug Break/watch
Line 6 Col 1 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
void main()
{
printf("My First C Program");
}
/*
Fn+F2 - Save
Alt+F9-compile
Ctrl+F9-Run
Alt+F5-Output
*/
Activate Windows
Go to PC settings to activate Windows.
10:13 AM
21-Sep-23

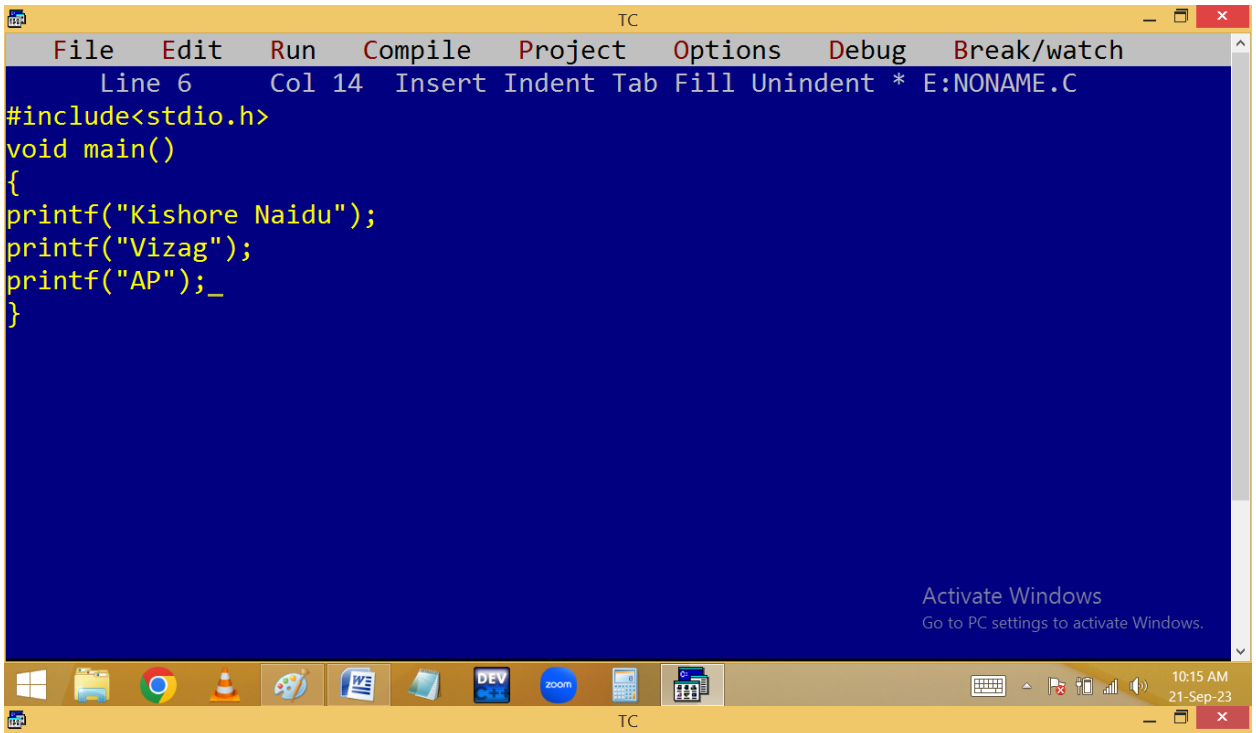

TC
My First C Program
Activate Windows
Go to PC settings to activate Windows.
10:13 AM
21-Sep-23

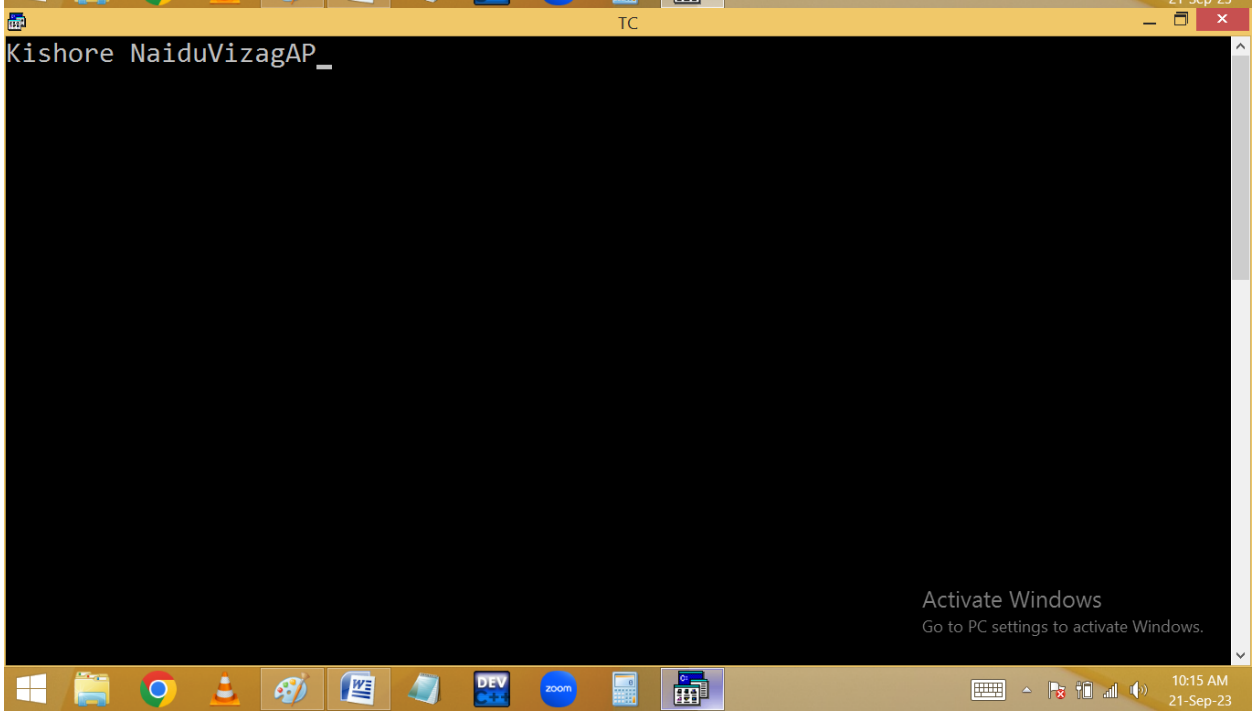

TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 1 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
int main()
{
printf("Good morning");
return 0;
printf("Good night");
}
Activate Windows
Go to PC settings to activate Windows.
10:14 AM
21-Sep-23

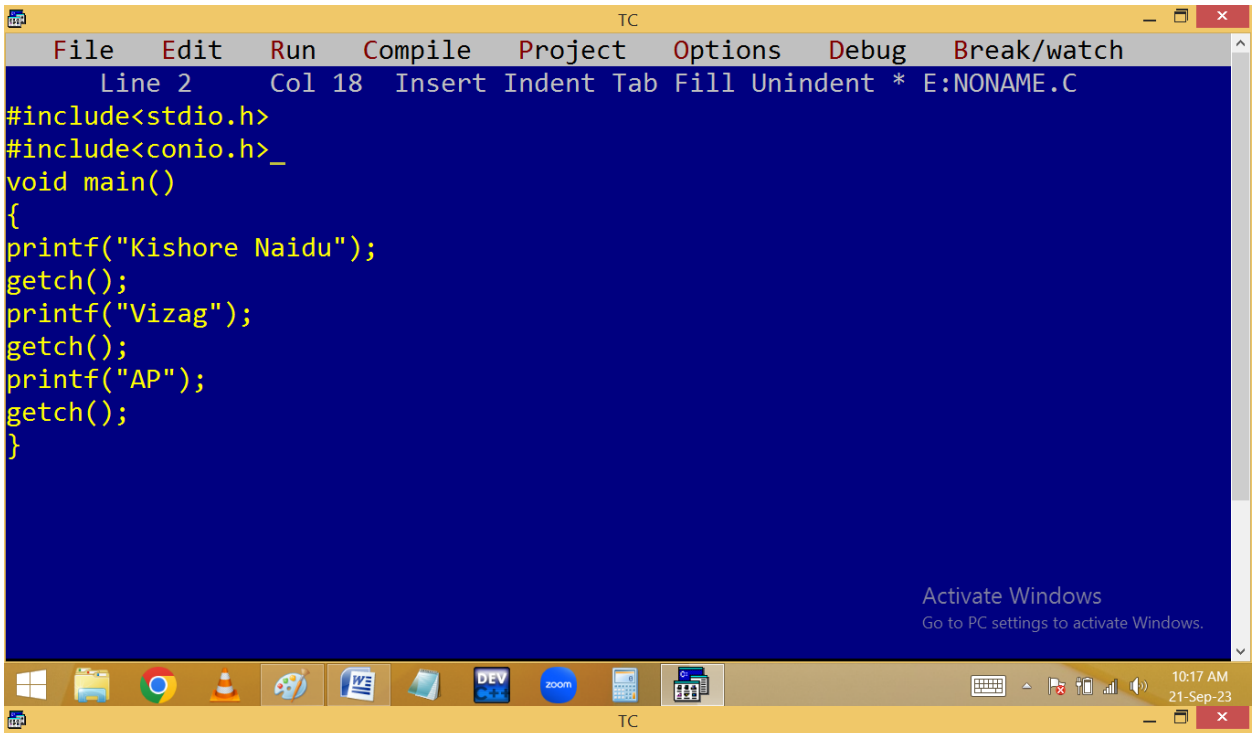

TC
Good morning
Activate Windows
Go to PC settings to activate Windows.
10:14 AM
21-Sep-23

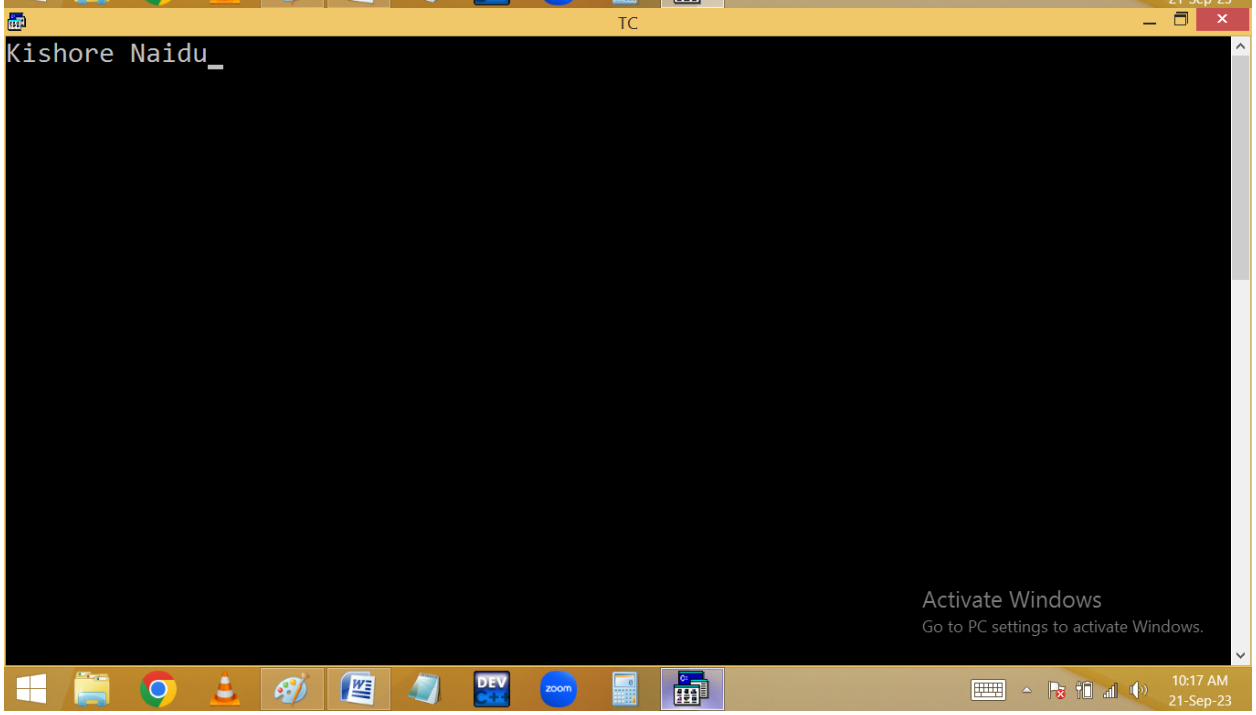

TC
File Edit Run Compile Project Options Debug Break/watch
Line 5 Col 8 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
void main()
{
printf("Good morning");
return ;
printf("Good night");
}
Activate Windows
Go to PC settings to activate Windows.
10:14 AM
21-Sep-23

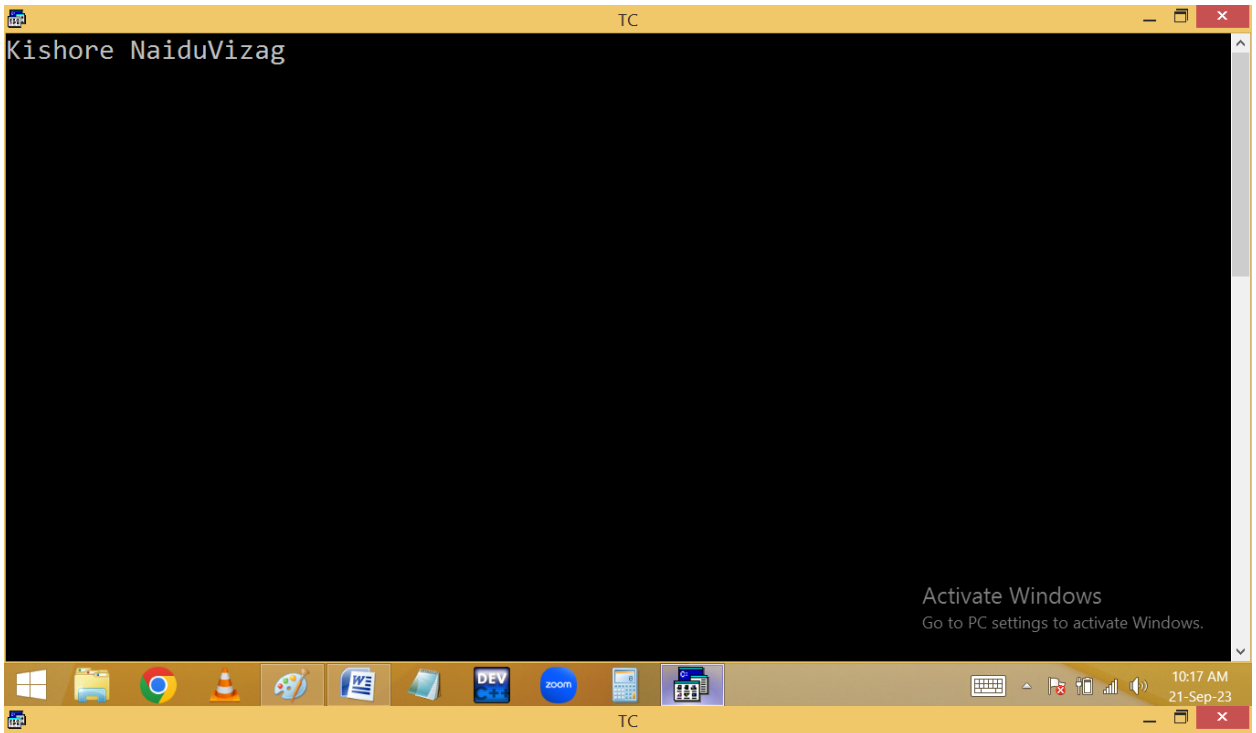

TC
Good morning
Activate Windows
Go to PC settings to activate Windows.
10:14 AM
21-Sep-23


TC
File Edit Run Compile Project Options Debug Break/watch
Line 6 Col 14 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
void main()
{
printf("Kishore Naidu");
printf("Vizag");
printf("AP");_
}
Activate Windows
Go to PC settings to activate Windows.
10:15 AM
21-Sep-23


TC
Kishore NaiduVizagAP_
Activate Windows
Go to PC settings to activate Windows.
10:15 AM
21-Sep-23


TC
File Edit Run Compile Project Options Debug Break/watch
Line 2 Col 18 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
printf("Kishore Naidu");
getch();
printf("Vizag");
getch();
printf("AP");
getch();
}
Activate Windows
Go to PC settings to activate Windows.
10:17 AM
21-Sep-23


TC
Kishore Naidu
Activate Windows
Go to PC settings to activate Windows.
10:17 AM
21-Sep-23


TC
Kishore NaiduVizag
Activate Windows
Go to PC settings to activate Windows.
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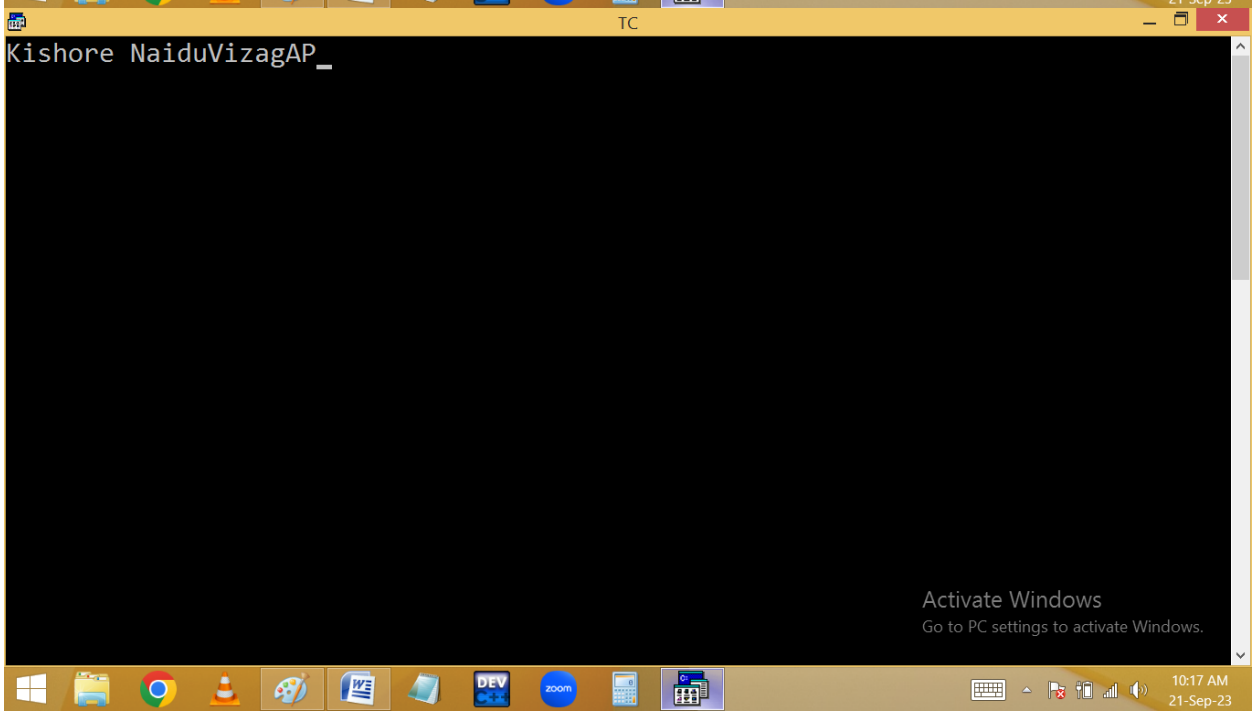
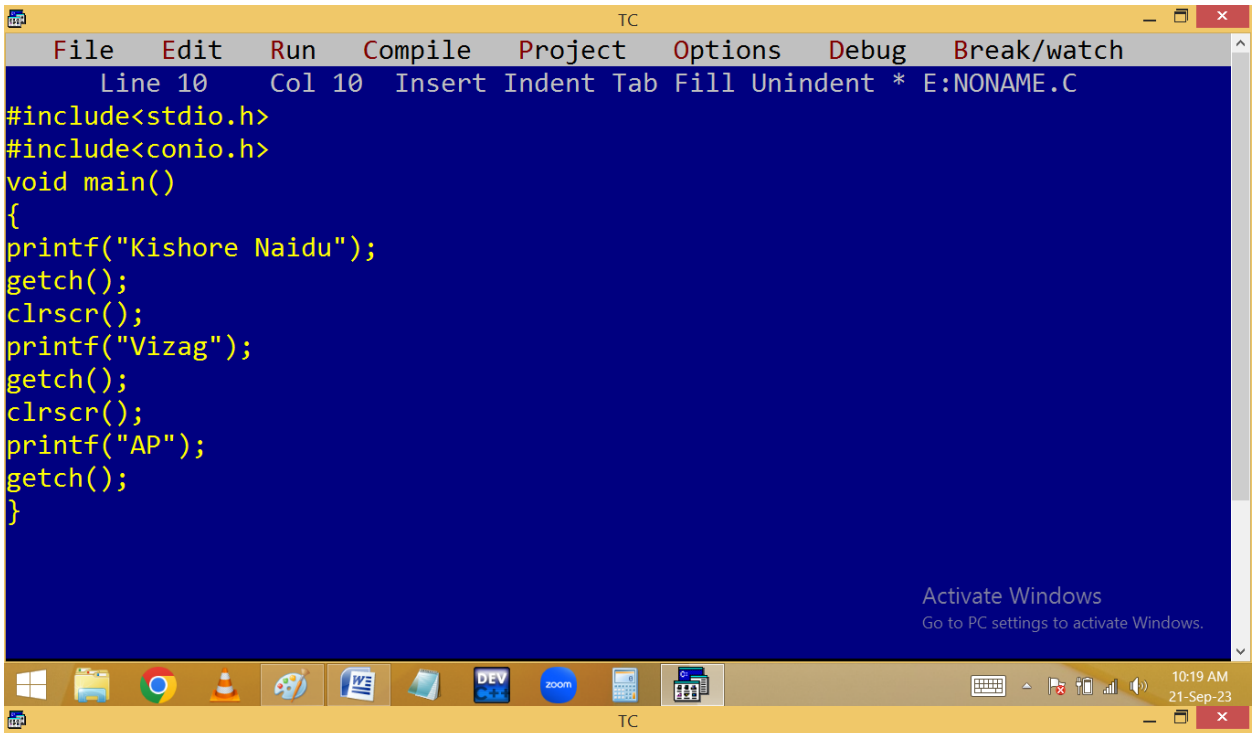
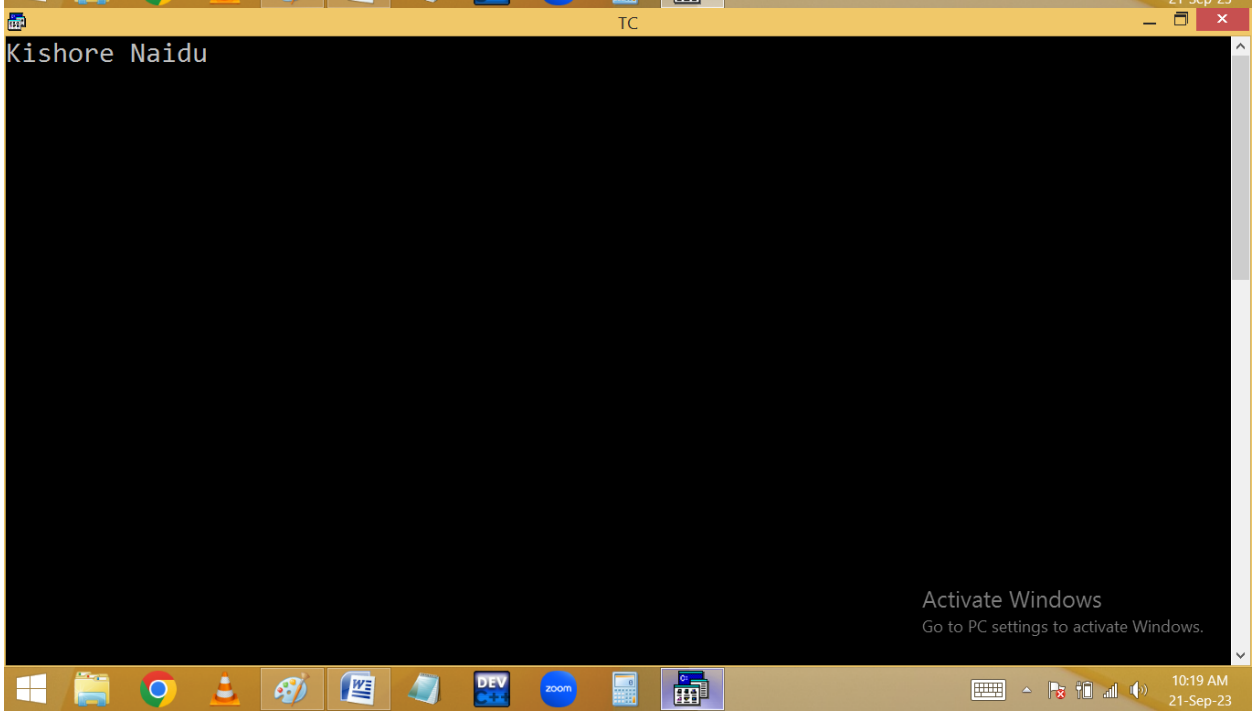
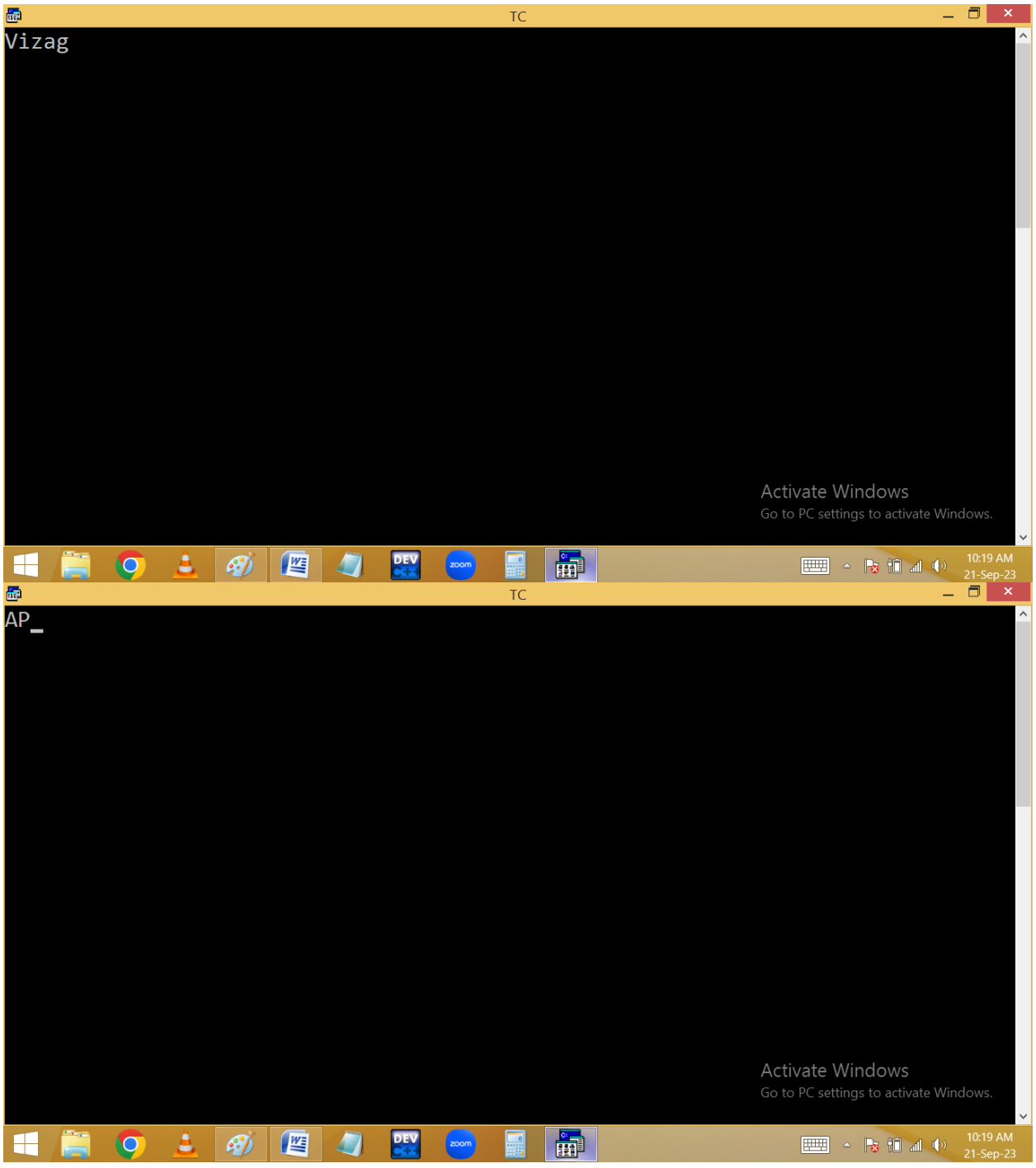
21-Sep-23


TC
Kishore NaiduVizagAP
Activate Windows
Go to PC settings to activate Windows.
10:17 AM
21-Sep-23


TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 10 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
printf("Kishore Naidu");
getch();
clrscr();
printf("Vizag");
getch();
clrscr();
printf("AP");
getch();
}
Activate Windows
Go to PC settings to activate Windows.
10:19 AM
21-Sep-23

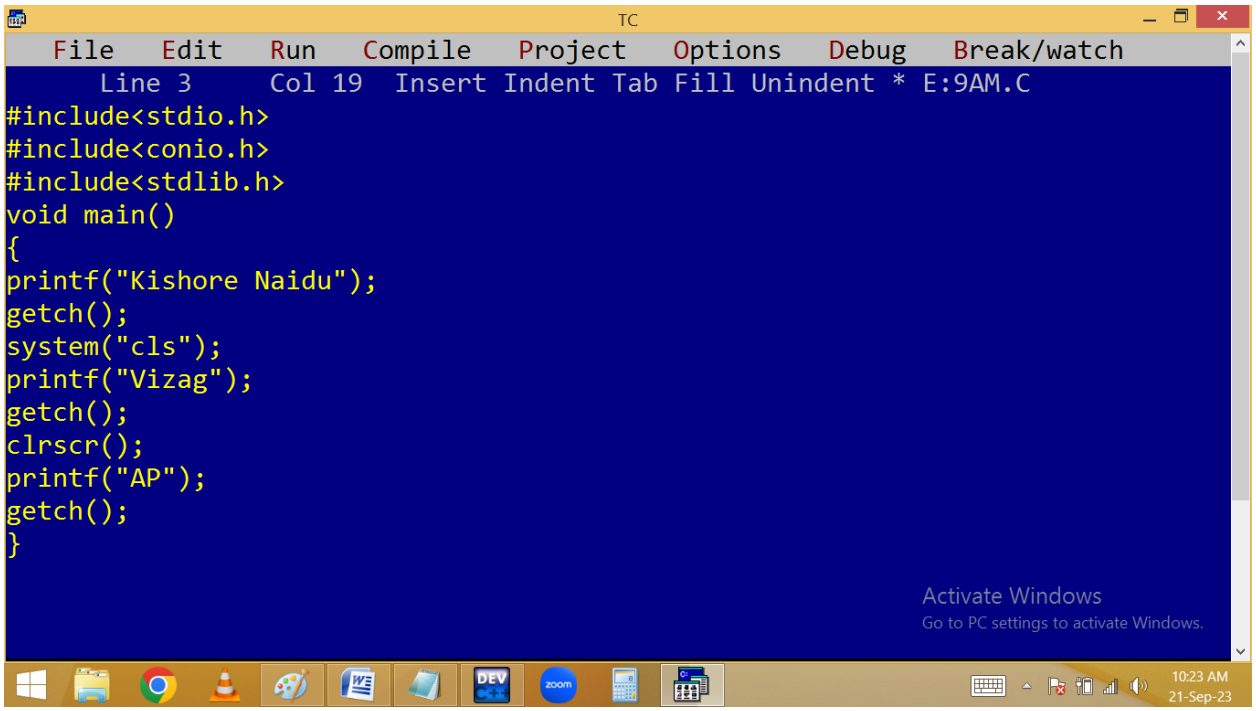

TC
Kishore Naidu
Activate Windows
Go to PC settings to activate Windows.
10:19 AM
21-Sep-23



In Dev C++:

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

```
#include<conio.h>
#include<stdlib.h>
main()
{
printf("Kishore Naidu");
getch();
system("cls");
printf("Vizag");
getch();
system("cls");
printf("AP");
getch();
}
```



BACK SLASH / ESCAPE SEQUENCE CHARACTERS

They started with back slash [\ ].

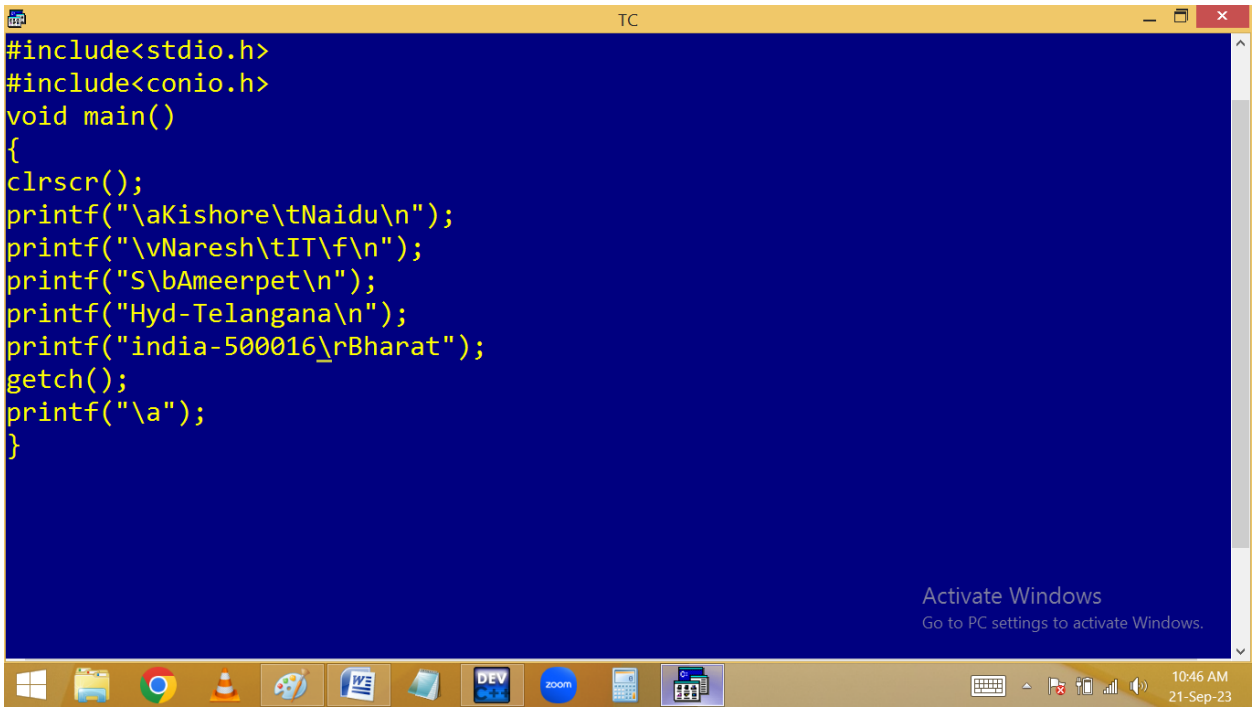
They used to format the outputs.

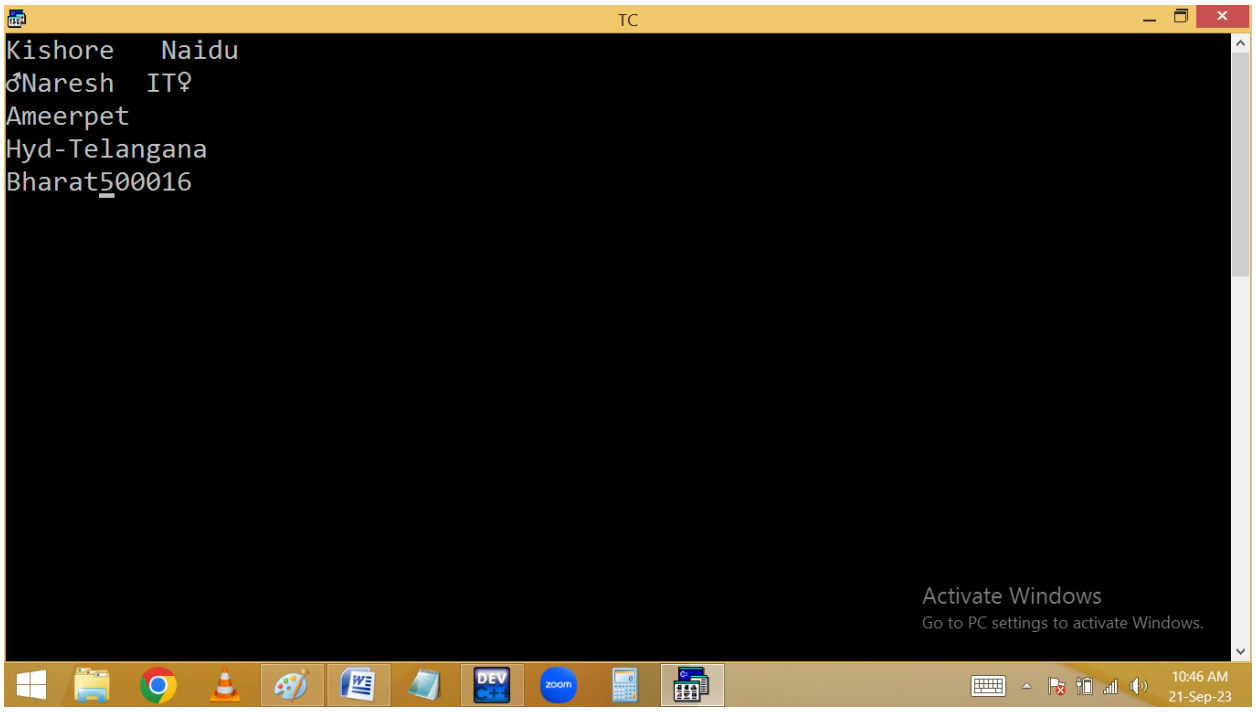
They participated in program execution but not displayed in output. Hence they are also called **escape sequence characters**.

Each back slash character=**1 byte i.e. one character.**

BACK SLASH CHARACTER	DESCRIPTION
\a	Alert [beep sound]
\b	Back space
\n	New line character

\t	Tab space
\r	Carriage return[beginning of line]
\f	Form feed ♀
\v	Vertical tab ♂
\0	Null char
\\	\ [invalid]
\k	k [invalid]


TC
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("\aKishore\tNaidu\n");
printf("\vNaresh\tIT\f\n");
printf("S\bAmeerpet\n");
printf("Hyd-Telangana\n");
printf("india-500016\rBharat");
getch();
printf("\a");
}
Activate Windows
Go to PC settings to activate Windows.
10:46 AM
21-Sep-23


TC
Kishore Naidu
♂Naresh IT♀
Ameerpet
Hyd-Telangana
Bharat500016
Activate Windows
Go to PC settings to activate Windows.
10:46 AM
21-Sep-23