printf(): It is the major output function in C.

It is a predefined function available in standard input output header file.

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

In printf, f means formatted.

Syntax:

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

Note:

1. In printf the first argument should be in " ".
2. In printf execution order is right to left and printing is left to right.
3. Printf always return an int that indicates the visible characters in printf.
4. Printf can perform both formatted and unformatted operations.

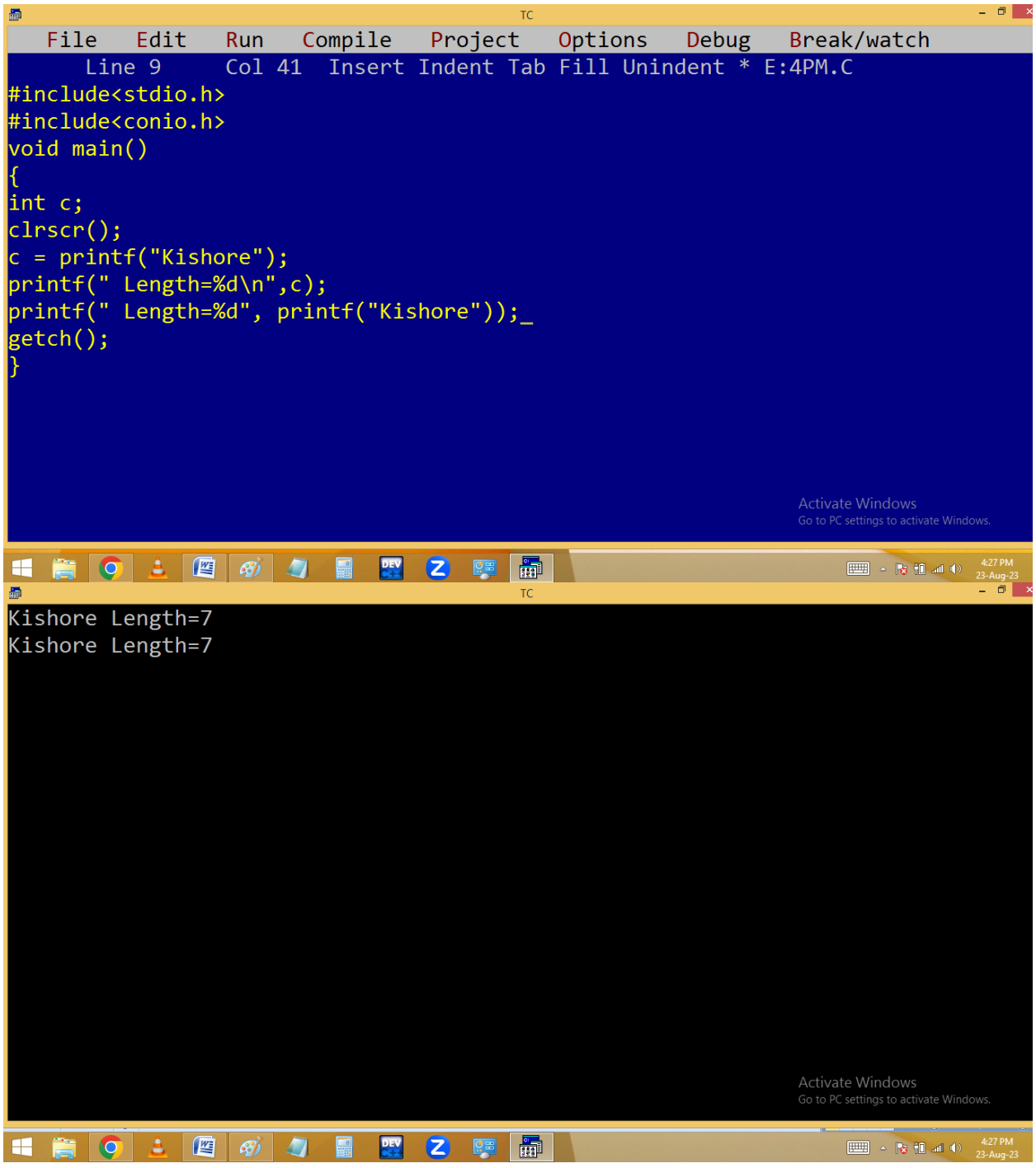
   Eg:

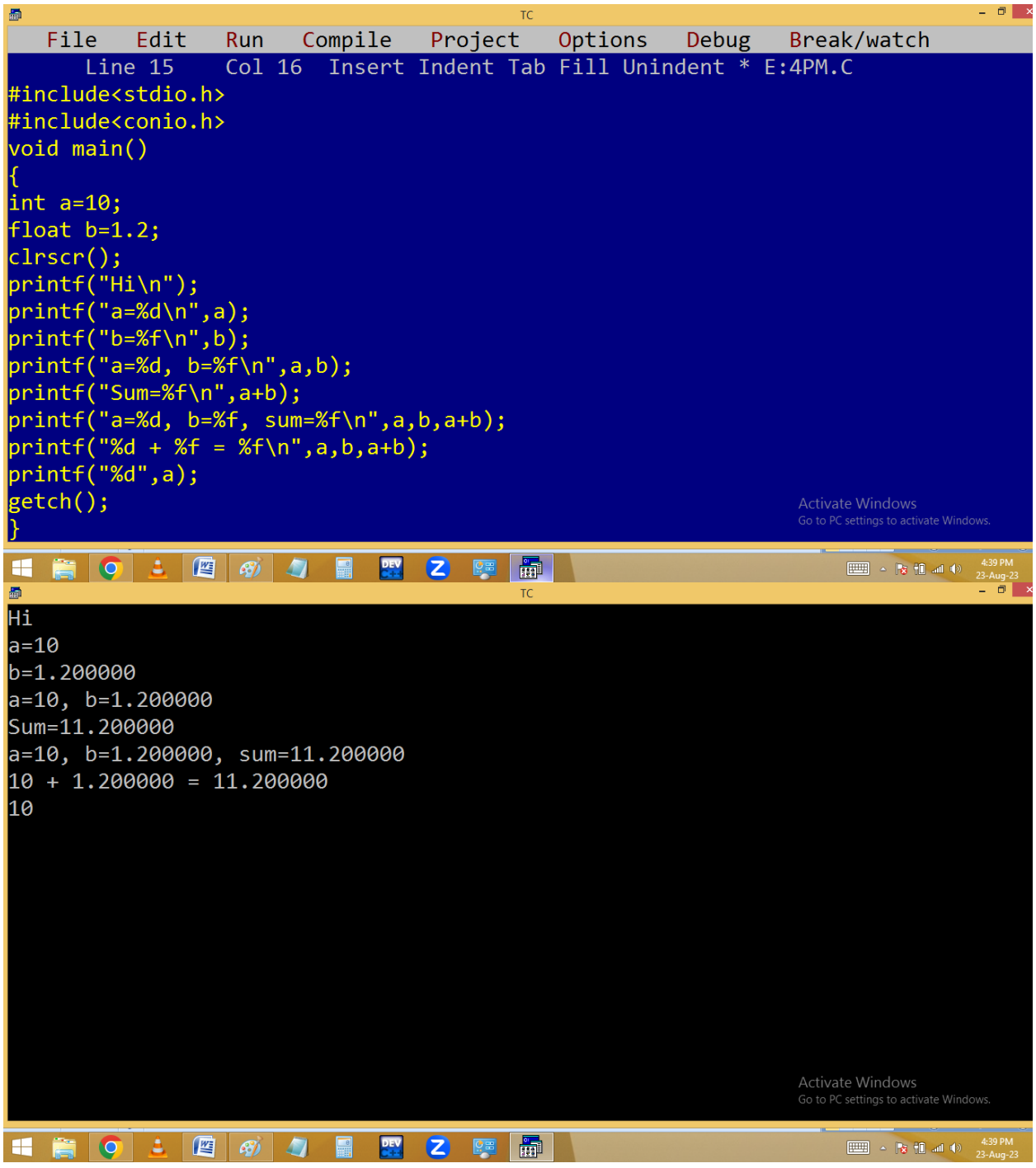
   printf("Hi"); // unformatted

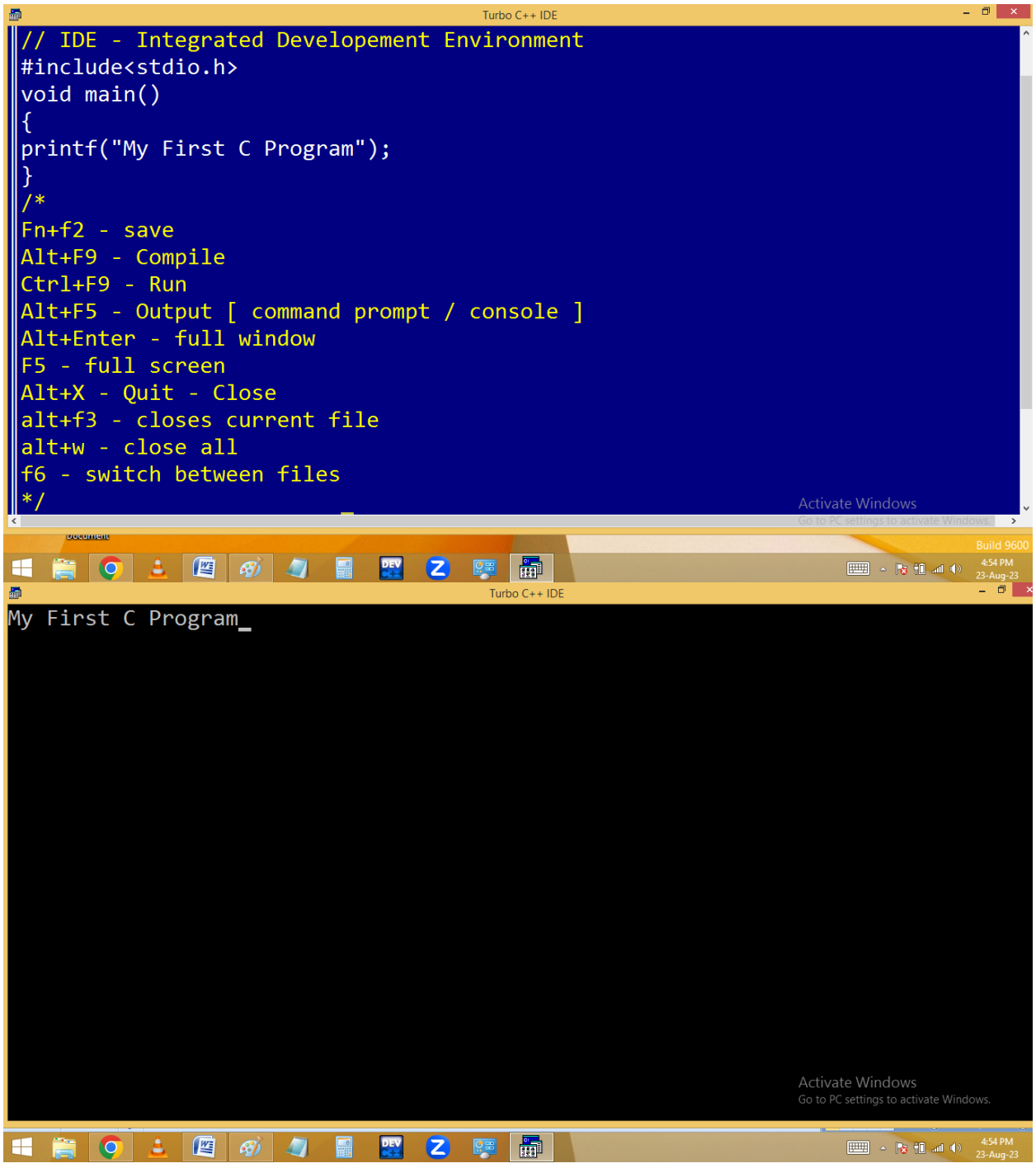
   printf("%d",10); //formatted

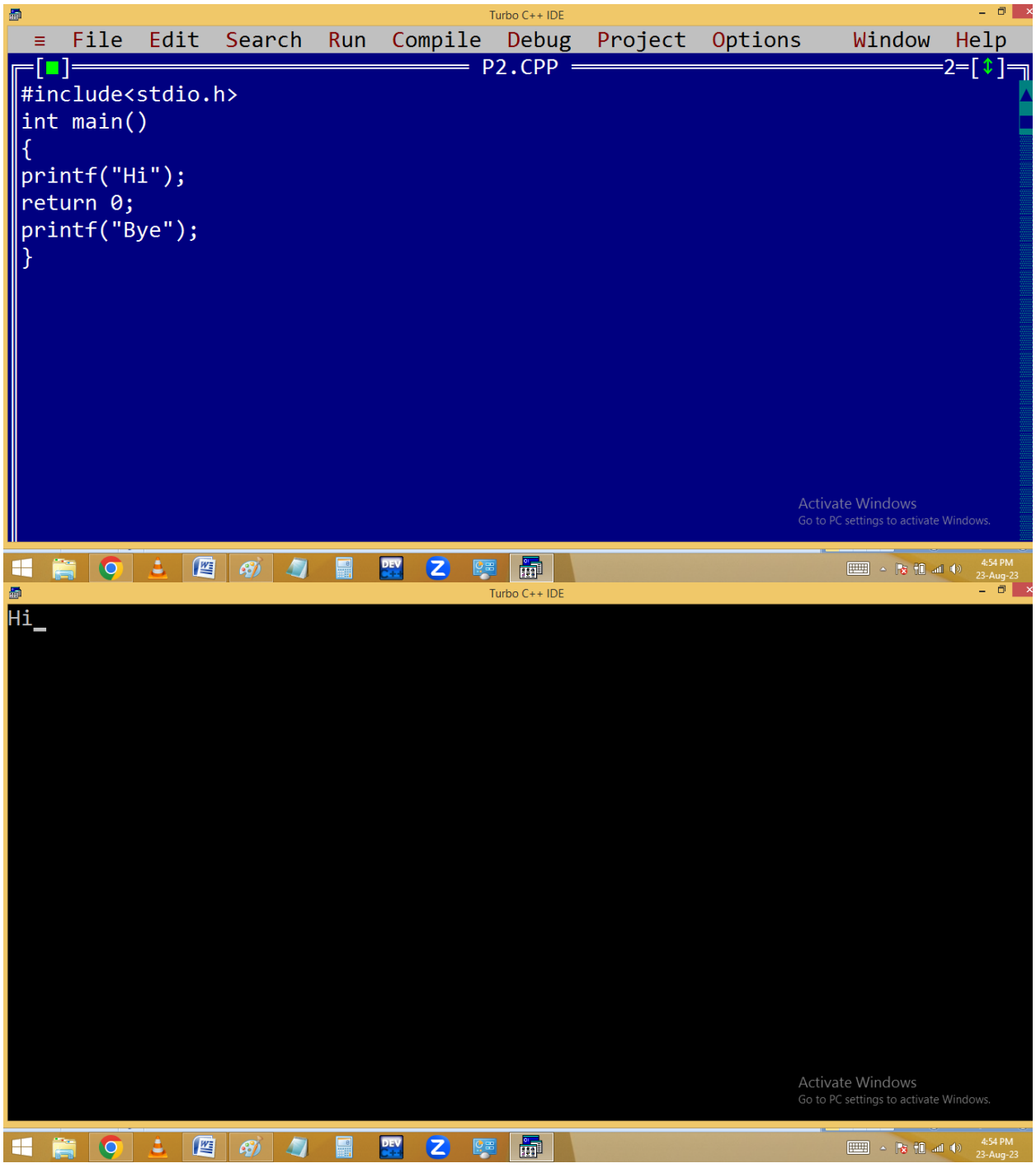
5. In printf everything is printed as it is except conversion characters and back slash characters.

Ex: Write a C program to find string length without using strlen() or loop.


TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 41 Insert Indent Tab Fill Unindent * E:4PM.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.
4:27 PM
23-Aug-23
TC
Kishore Length=7
Kishore Length=7
Activate Windows
Go to PC settings to activate Windows.
4:27 PM
23-Aug-23


TC
File Edit Run Compile Project Options Debug Break/watch
Line 15 Col 16 Insert Indent Tab Fill Unindent * E:4PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=10;
float b=1.2;
clrscr();
printf("Hi\n");
printf("a=%d\n",a);
printf("b=%f\n",b);
printf("a=%d, b=%f\n",a,b);
printf("Sum=%f\n",a+b);
printf("a=%d, b=%f, sum=%f\n",a,b,a+b);
printf("%d + %f = %f\n",a,b,a+b);
printf("%d",a);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
4:39 PM
23-Aug-23
TC
Hi
a=10
b=1.200000
a=10, b=1.200000
Sum=11.200000
a=10, b=1.200000, sum=11.200000
10 + 1.200000 = 11.200000
10
Activate Windows
Go to PC settings to activate Windows.
4:39 PM
23-Aug-23


Turbo C++ IDE
// IDE - Integrated Developement Environment
#include<stdio.h>
void main()
{
printf("My First C Program");
}
/*
Fn+f2 - save
Alt+F9 - Compile
Ctrl+F9 - Run
Alt+F5 - Output [command prompt / console]
Alt+Enter - full window
F5 - full screen
Alt+X - Quit - Close
alt+f3 - closes current file
alt+w - close all
f6 - switch between files
*/
Activate Windows
Go to PC settings to activate Windows.
Build 9600
4:54 PM
23-Aug-23
Turbo C++ IDE
My First C Program
Activate Windows
Go to PC settings to activate Windows.
4:54 PM
23-Aug-23


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P2.CPP
#include<stdio.h>
int main()
{
printf("Hi");
return 0;
printf("Bye");
}
Activate Windows
Go to PC settings to activate Windows.
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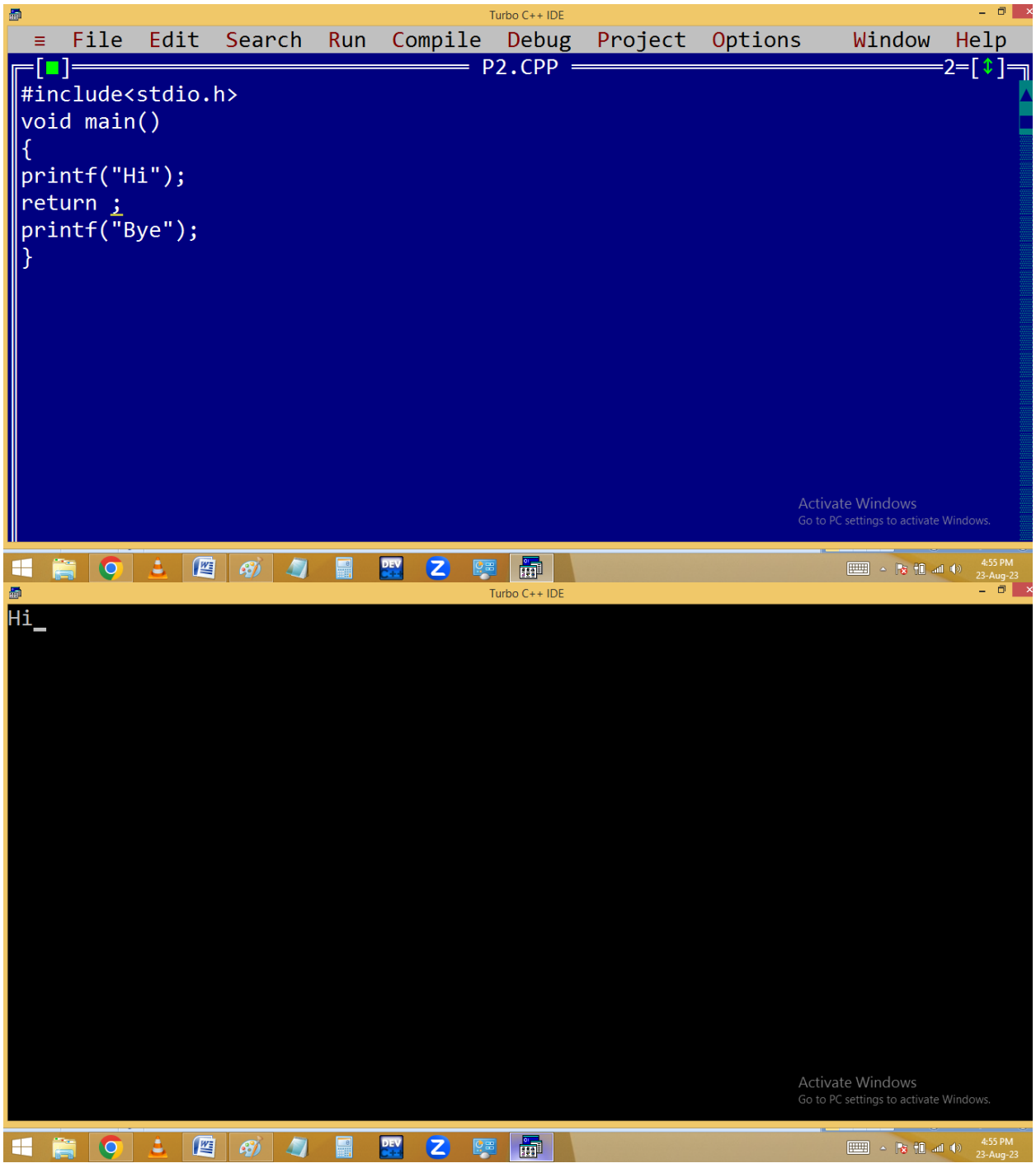
23-Aug-23
Turbo C++ IDE
Hi
Activate Windows
Go to PC settings to activate Windows.
4:54 PM
23-Aug-23


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P2.CPP
#include<stdio.h>
void main()
{
printf("Hi");
return ;
printf("Bye");
}
Activate Windows
Go to PC settings to activate Windows.
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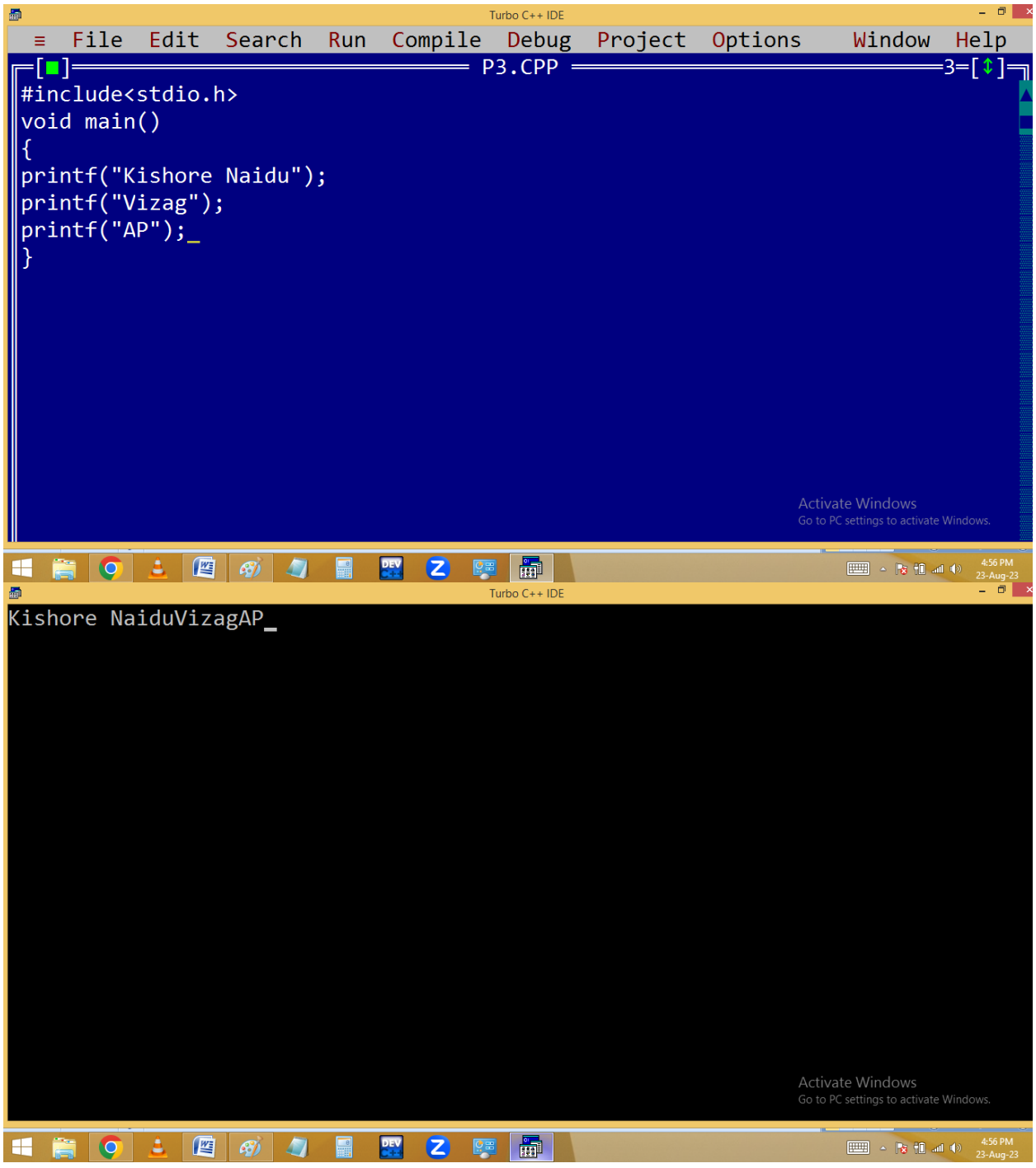
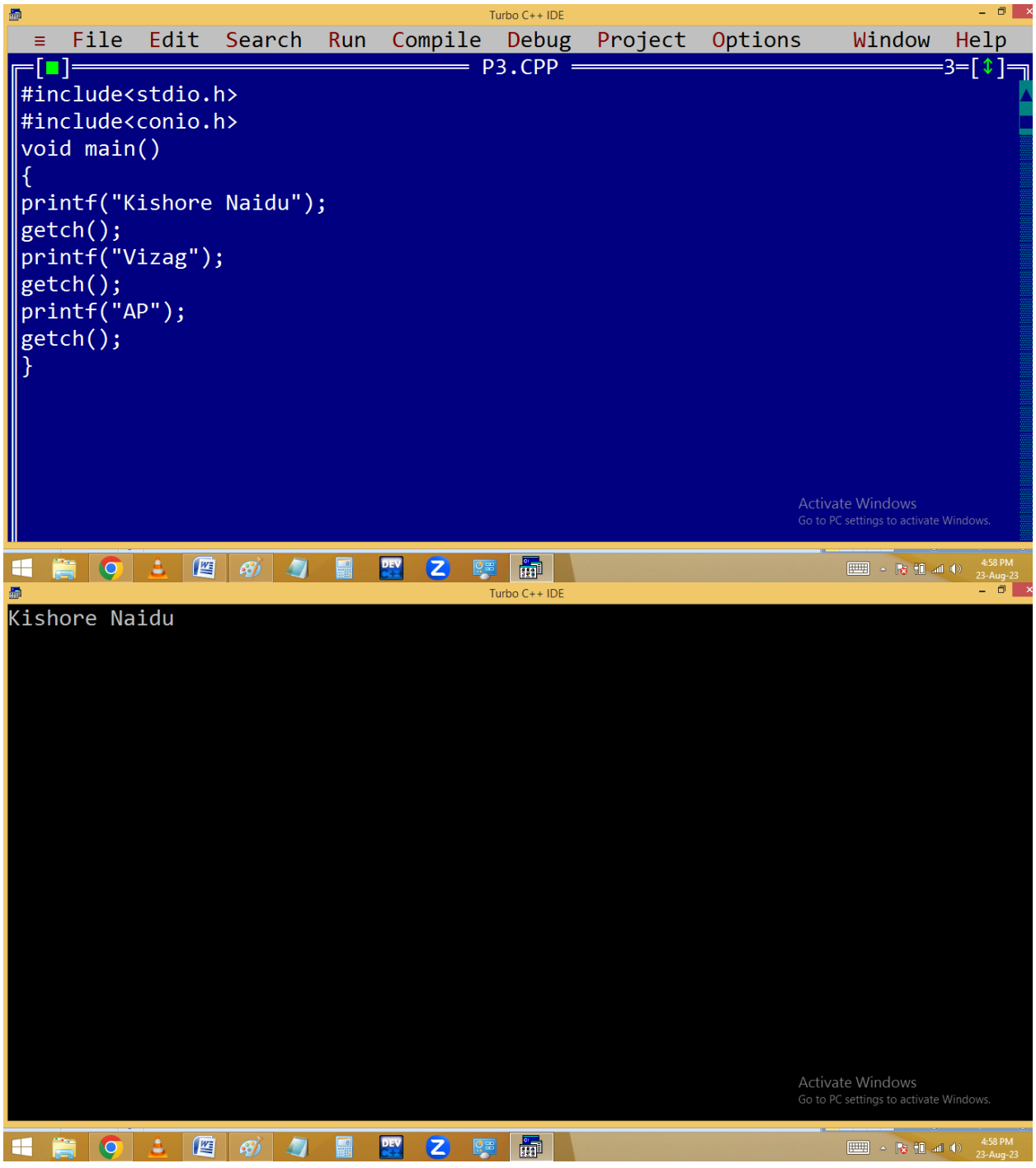
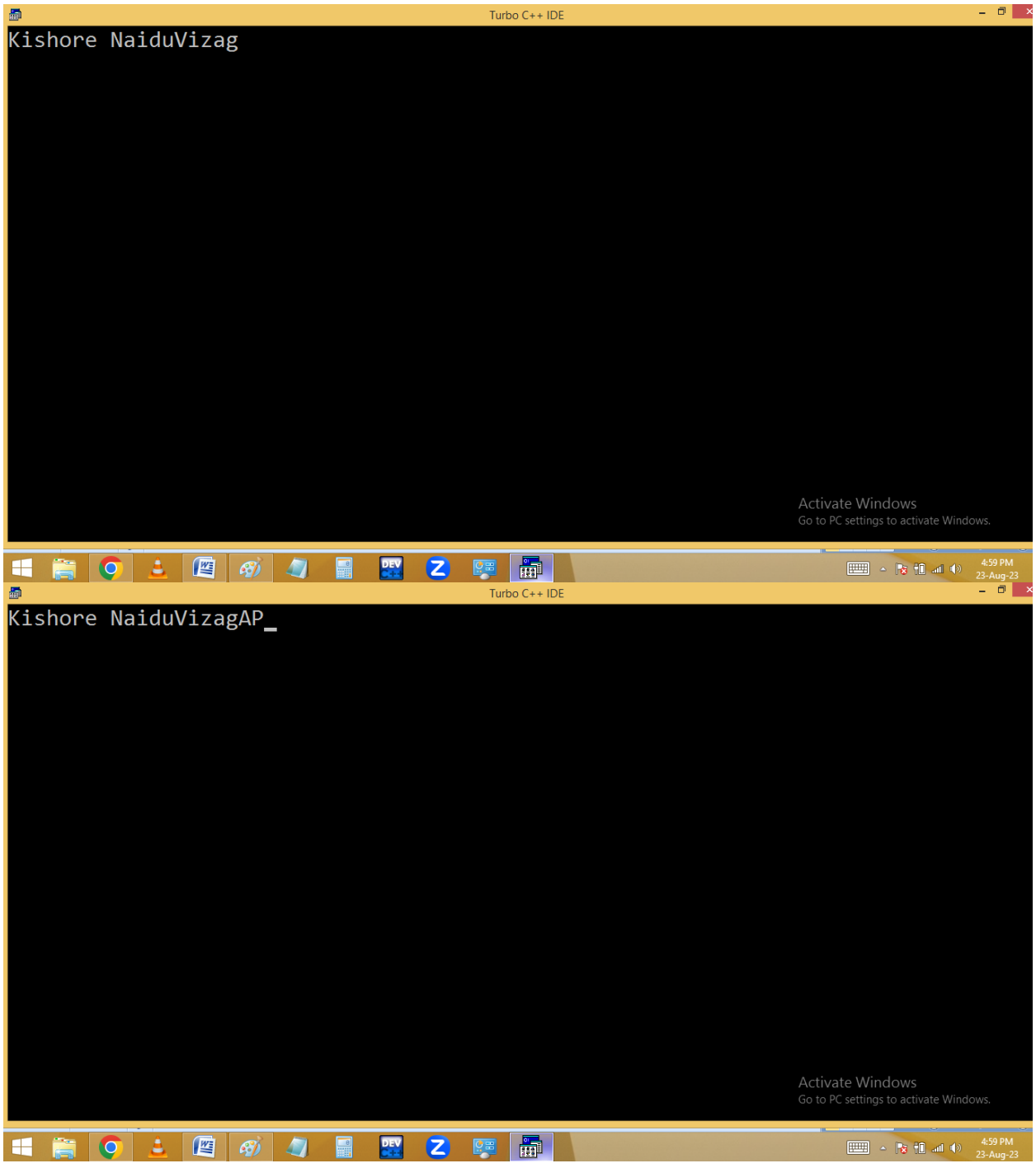
23-Aug-23
Turbo C++ IDE
Hi
Activate Windows
Go to PC settings to activate Windows.
4:55 PM
23-Aug-23


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P3.CPP
#include<stdio.h>
void main()
{
printf("Kishore Naidu");
printf("Vizag");
printf("AP");
}
Activate Windows
Go to PC settings to activate Windows.
4:56 PM
23-Aug-23
Turbo C++ IDE
Kishore NaiduVizagAP
Activate Windows
Go to PC settings to activate Windows.
4:56 PM
23-Aug-23


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P3.CPP
#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.
4:58 PM
23-Aug-23
Turbo C++ IDE
Kishore Naidu
Activate Windows
Go to PC settings to activate Windows.
4:58 PM
23-Aug-23


Turbo C++ IDE
Kishore NaiduVizag
Activate Windows
Go to PC settings to activate Windows.
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23-Aug-23
Turbo C++ IDE
Kishore NaiduVizagAP
Activate Windows
Go to PC settings to activate Windows.
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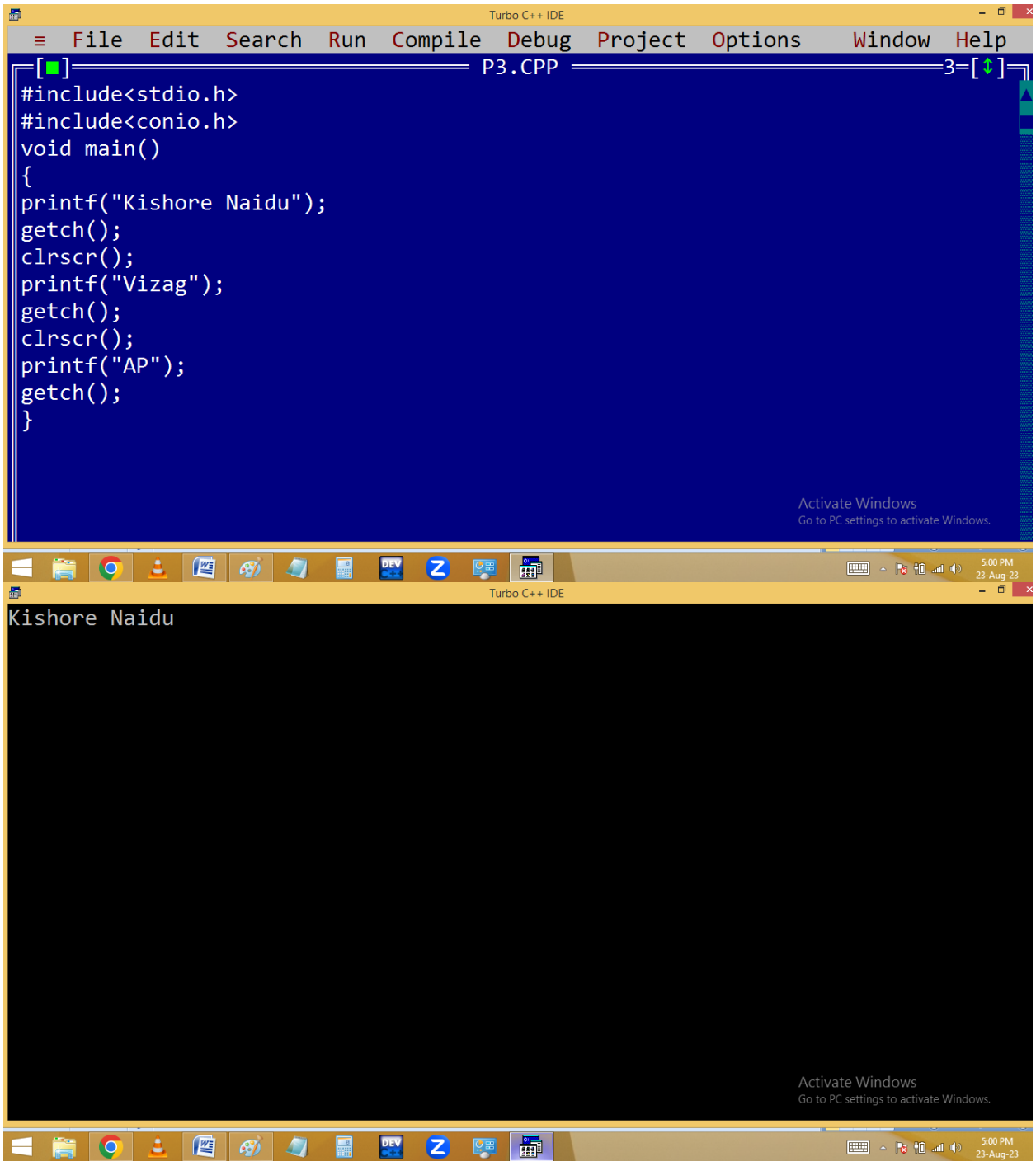
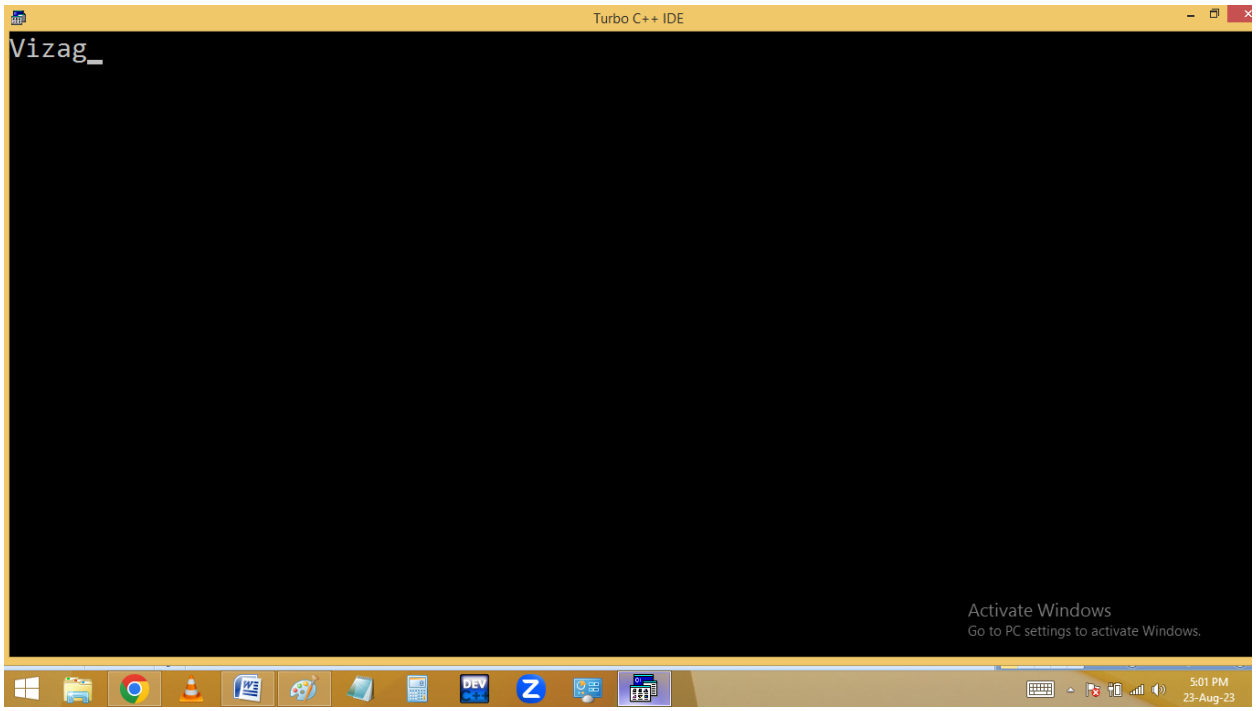
23-Aug-23


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P3.CPP
#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.
5:00 PM
23-Aug-23
Turbo C++ IDE
Kishore Naidu
Activate Windows
Go to PC settings to activate Windows.
5:00 PM
23-Aug-23


Turbo C++ IDE
Vizag_
Activate Windows
Go to PC settings to activate Windows.
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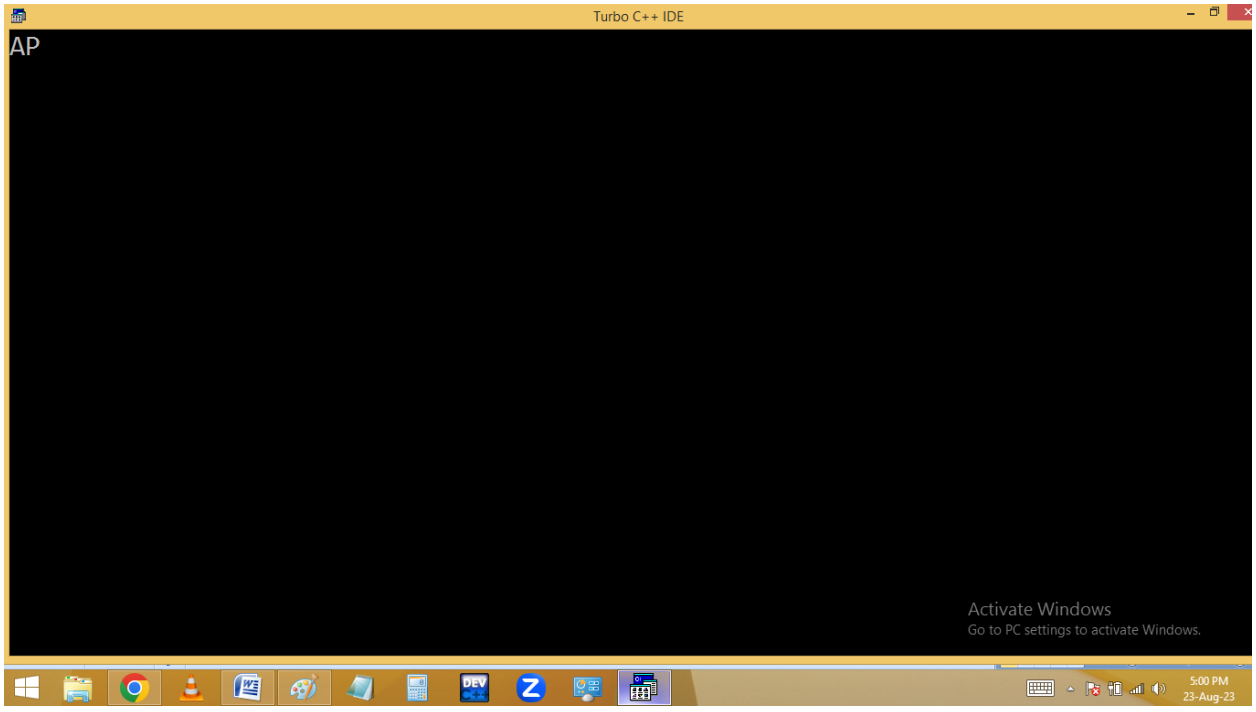
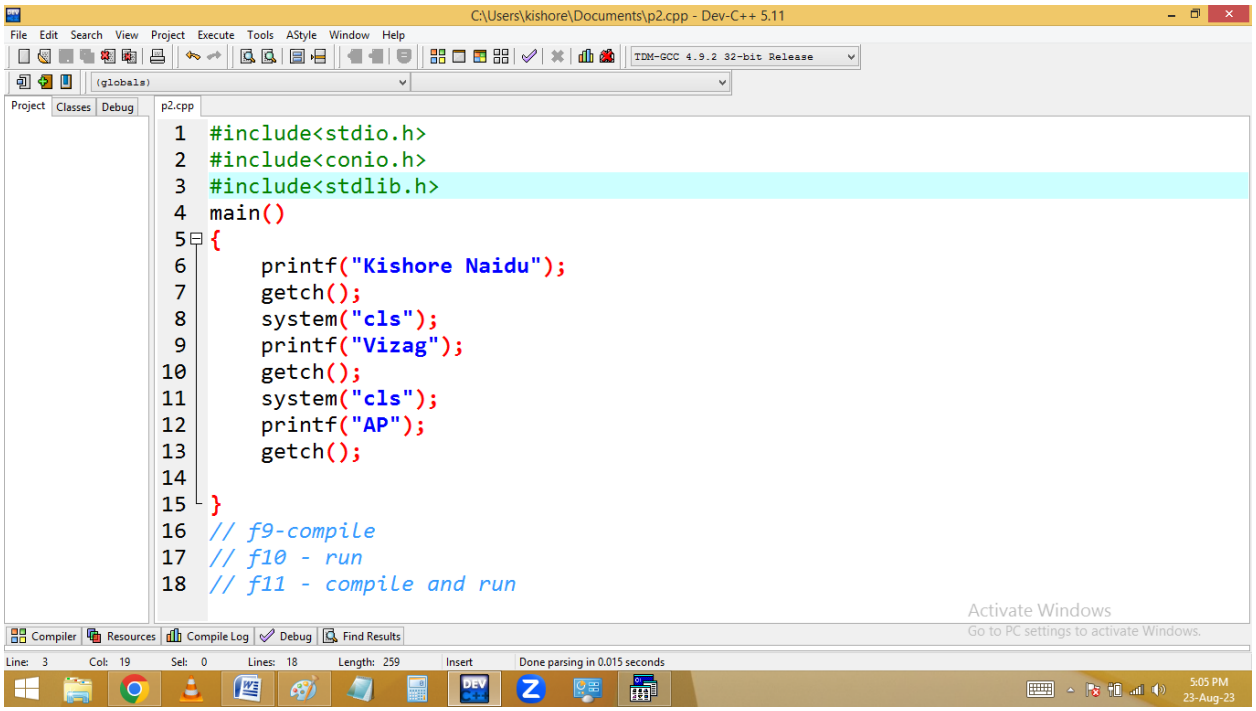
23-Aug-23


Turbo C++ IDE
AP
Activate Windows
Go to PC settings to activate Windows.
5:00 PM
23-Aug-23



BACK SLASH / ESCAPE SEQUENCE CHARACTERS

They started with back slash [\ ].

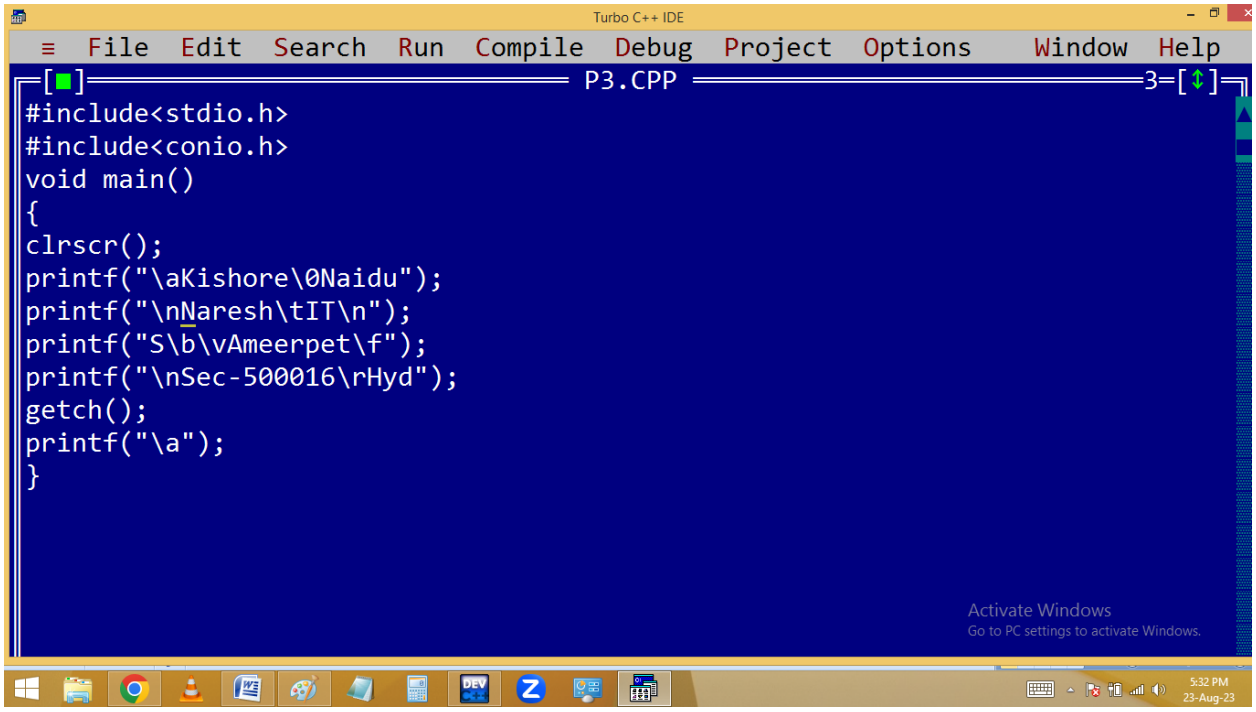
They used to format the outputs.

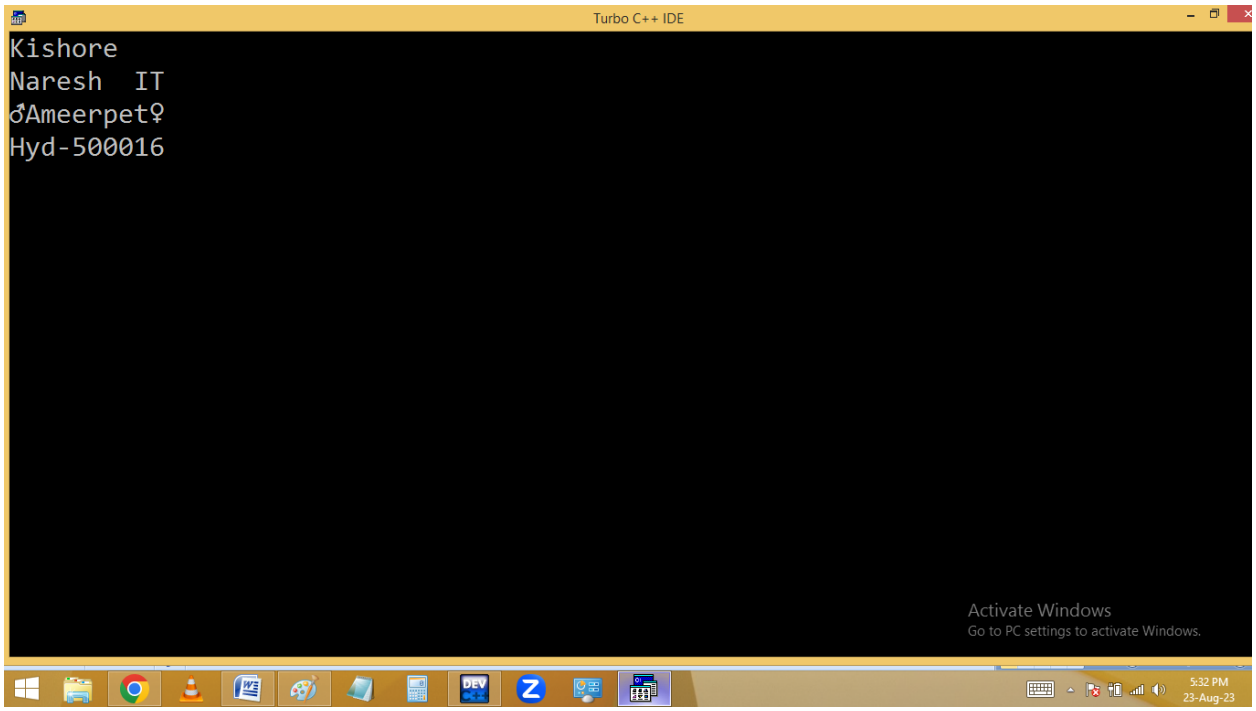
They participated in program execution but not displayed in output. Hence they are also called **escape sequence characters**.

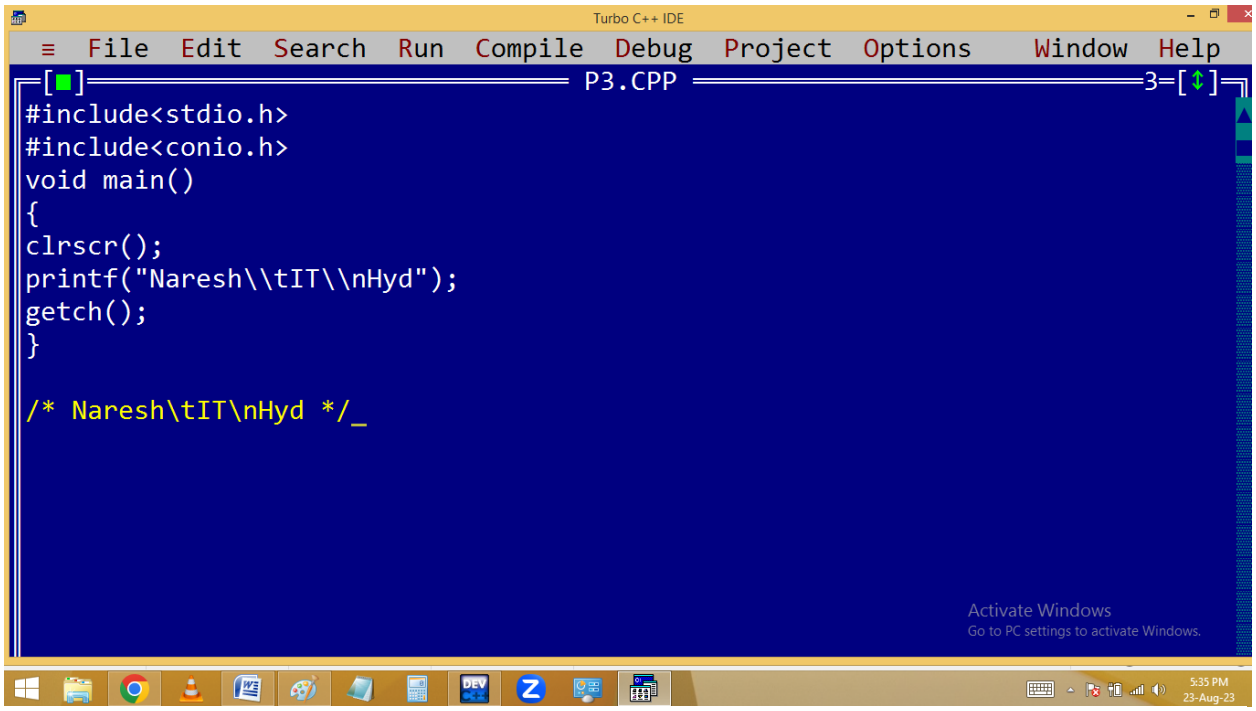
Each back slash character=**1 byte i.e. one character.**

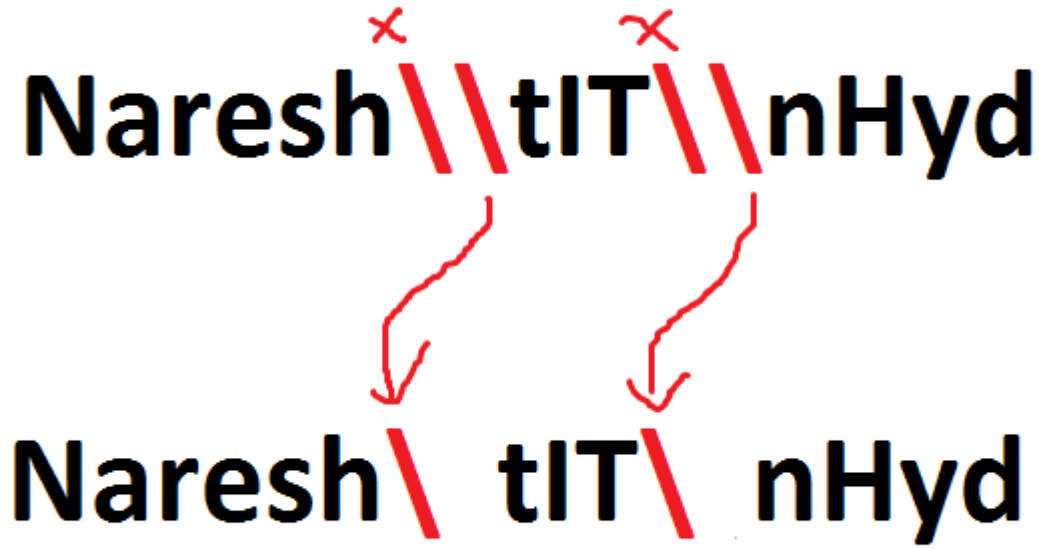
BACK SLASH CHARACTER	DESCRIPTION
\a	Alert [beep sound]
\b	Back space
\n	New line character

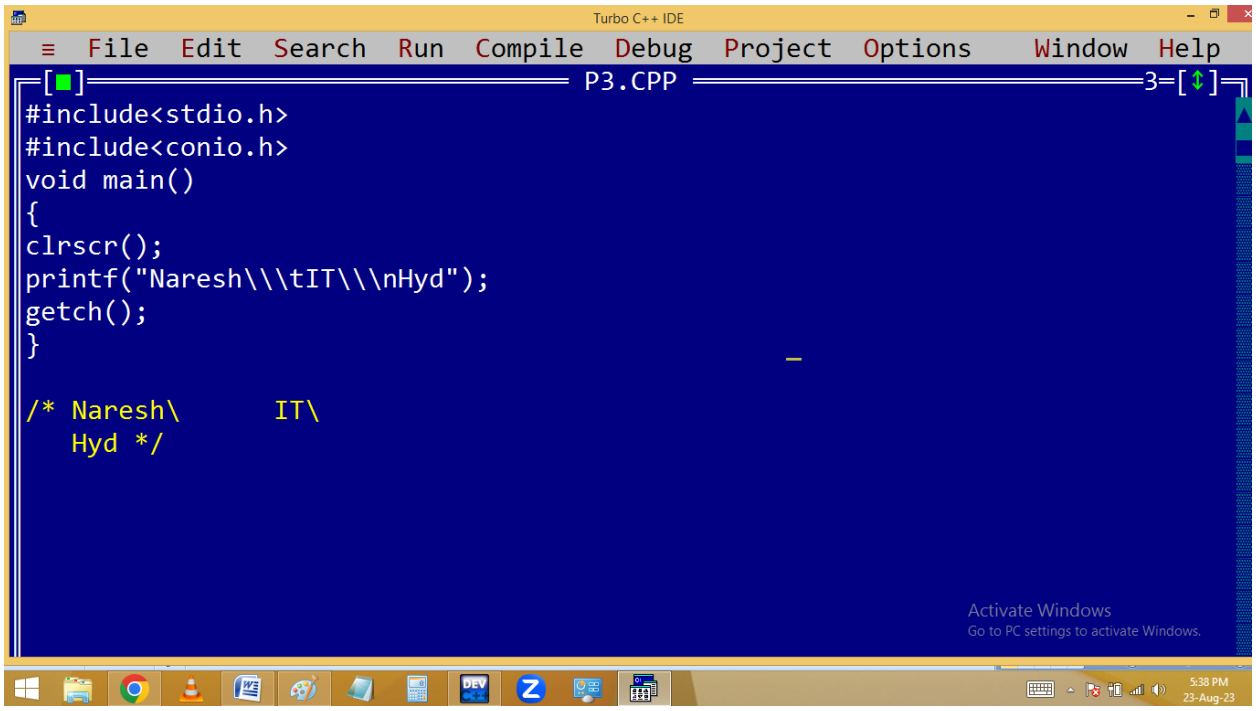
\t	Tab space
\r	Carriage return[beginning of line]
\f	Form feed ♀
\v	Vertical tab ♂
\0	Null char
\\	\ [invalid]
\k	k [invalid]

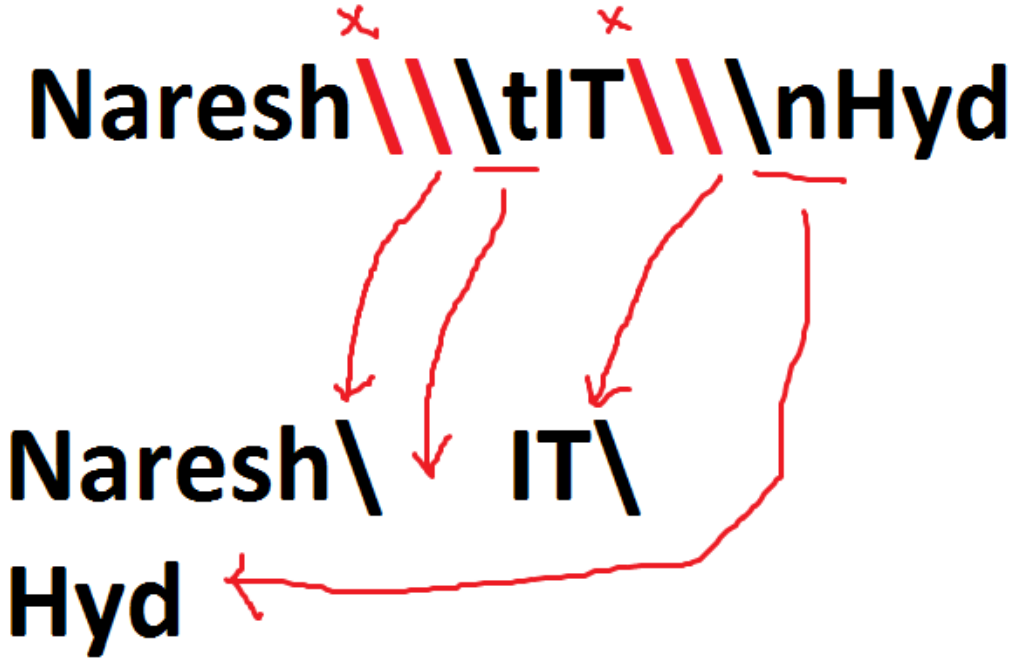


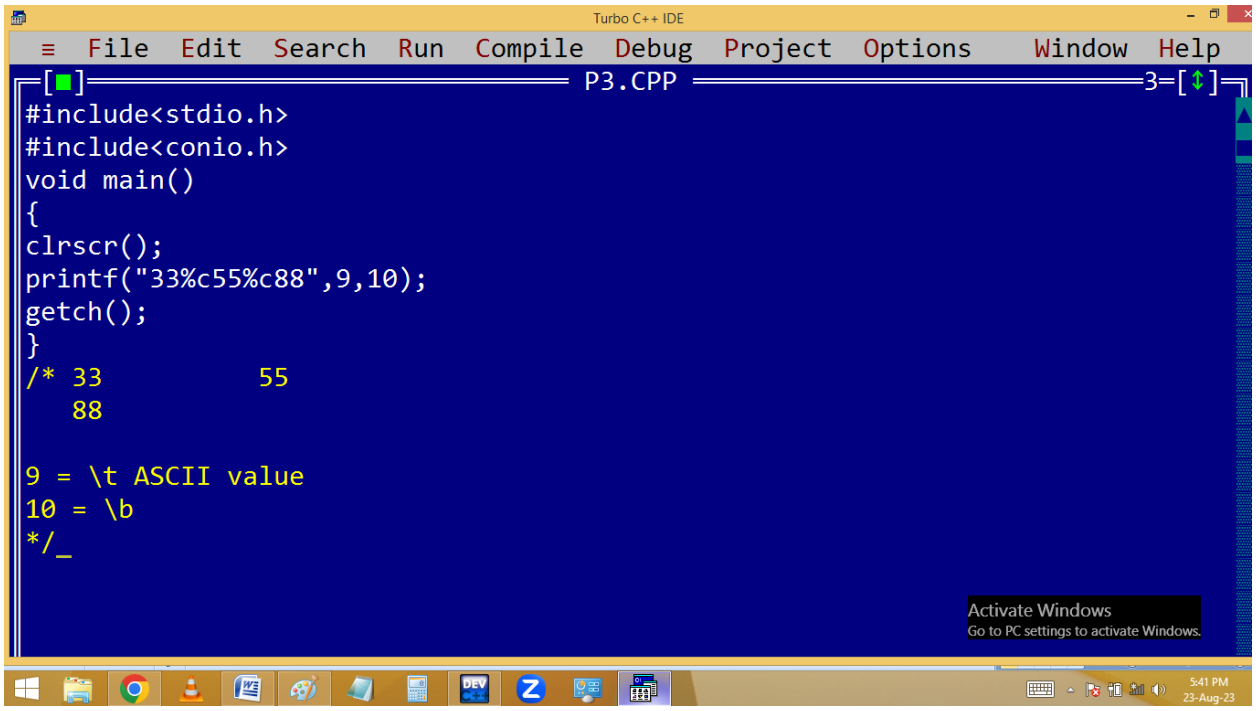

Turbo C++ IDE
Kishore
Naresh IT
♂Ameerpet♀
Hyd-500016
Activate Windows
Go to PC settings to activate Windows.
5:32 PM
23-Aug-23


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P3.CPP
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("Naresh\\tIT\\nHyd");
getch();
}
/* Naresh\tIT\nHyd */_
Activate Windows
Go to PC settings to activate Windows.
5:35 PM
23-Aug-23

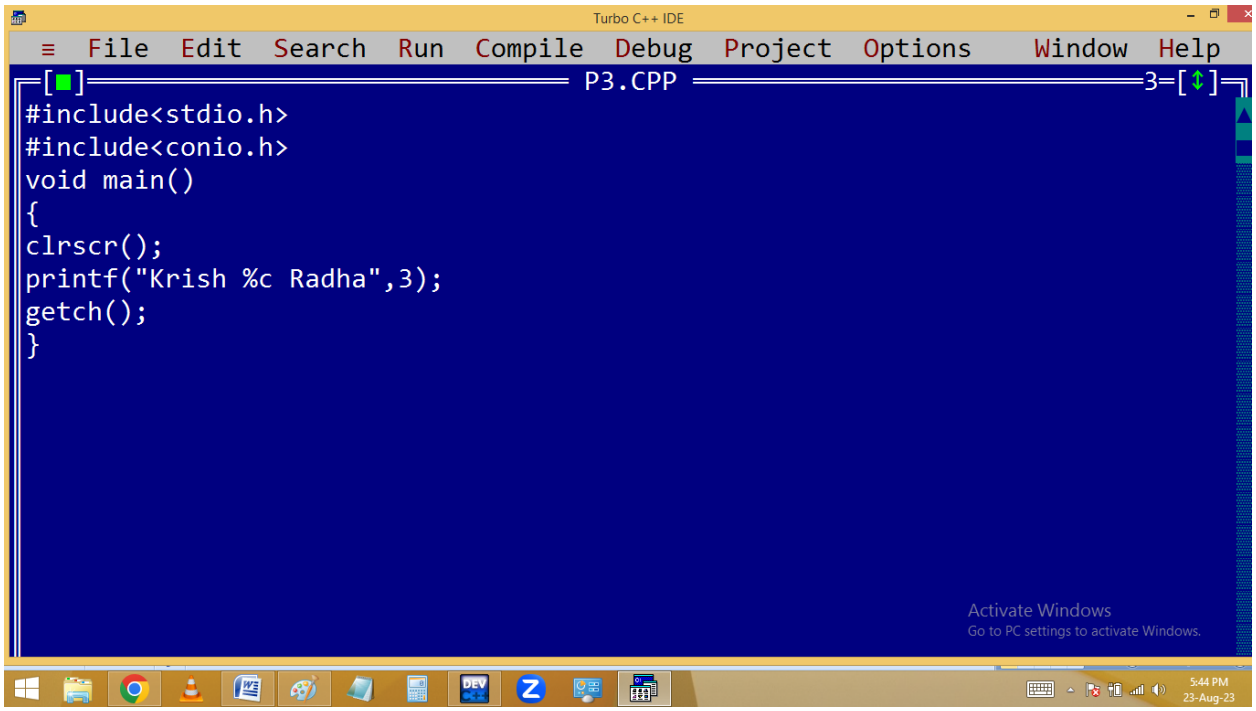

Naresh\\tIT\\nHyd
Naresh\ tIT\ nHyd

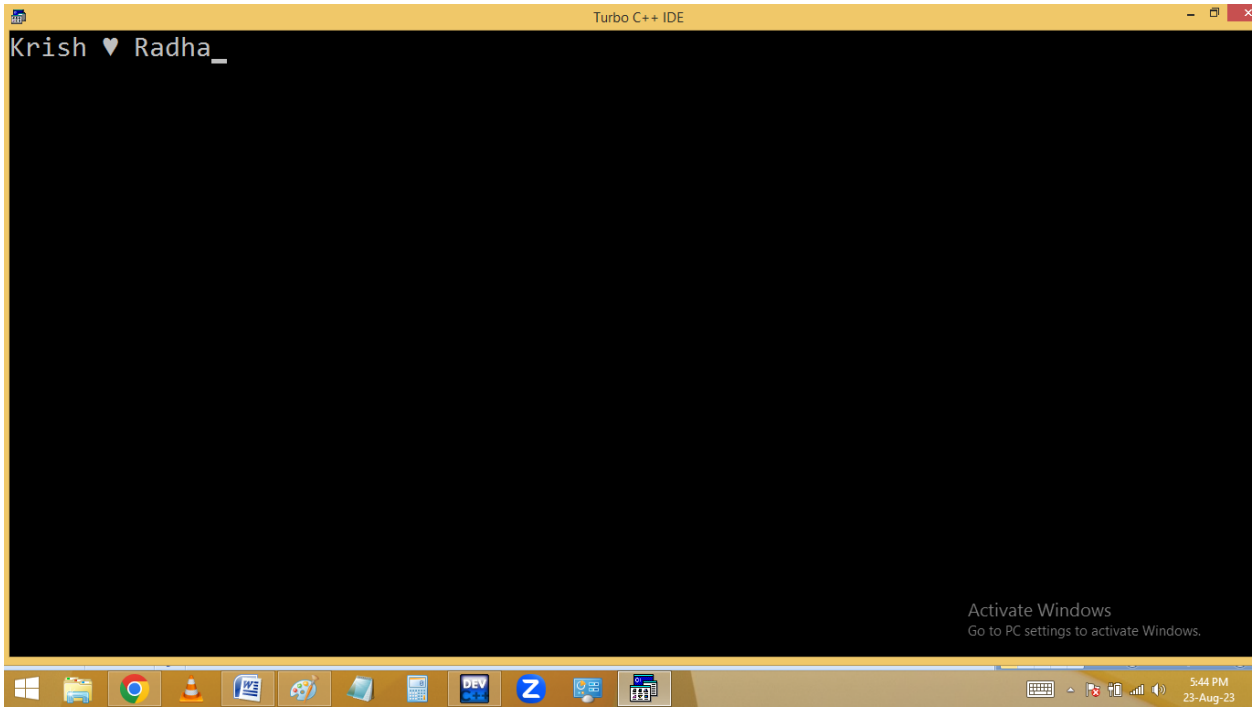

Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P3.CPP
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("Naresh\\\tIT\\\nHyd");
getch();
}
/* Naresh\ IT\
Hyd */
Activate Windows
Go to PC settings to activate Windows.


Naresh\\\tIT\\\nHyd
Naresh\
IT\
Hyd


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P3.CPP
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("33%c55%c88",9,10);
getch();
}
/* 33 55
88
9 = \t ASCII value
10 = \b
*/_
Activate Windows
Go to PC settings to activate Windows.

p("Naresh%cIT%cHyd",9,10);
\n
\t
\n


Turbo C++ IDE
File Edit Search Run Compile Debug Project Options Window Help
P3.CPP
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("Krish %c Radha",3);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
5:44 PM
23-Aug-23


Turbo C++ IDE
Krish ♥ Radha
Activate Windows
Go to PC settings to activate Windows.
5:44 PM
23-Aug-23