Compound assignment / short hand operator:

Here we are using assignment operator with combination of other operators as follows.

+=, -=, *=, %=, /=, <<=, >>=, ~=,…..

Eg:

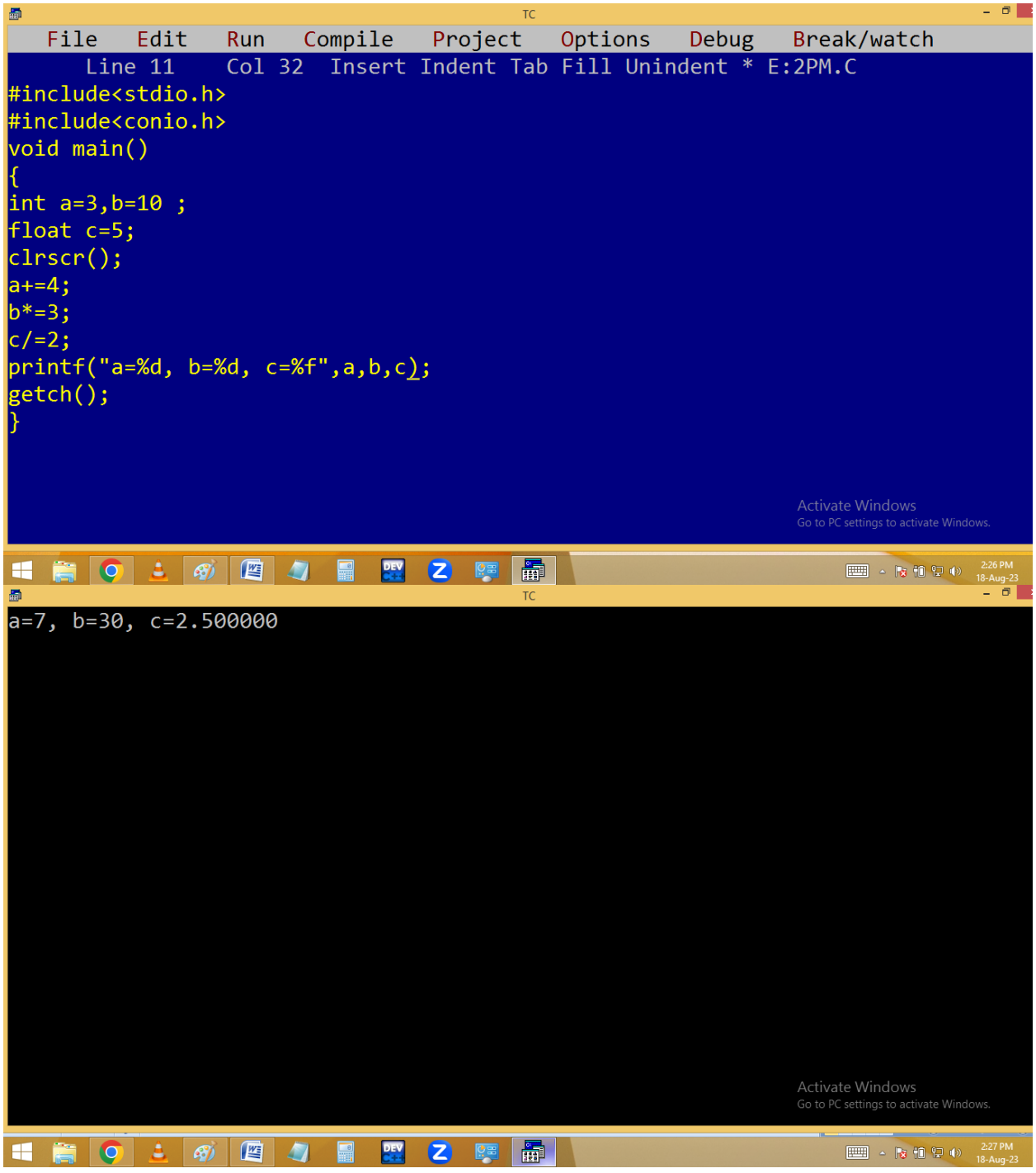
int a=3, b=10;

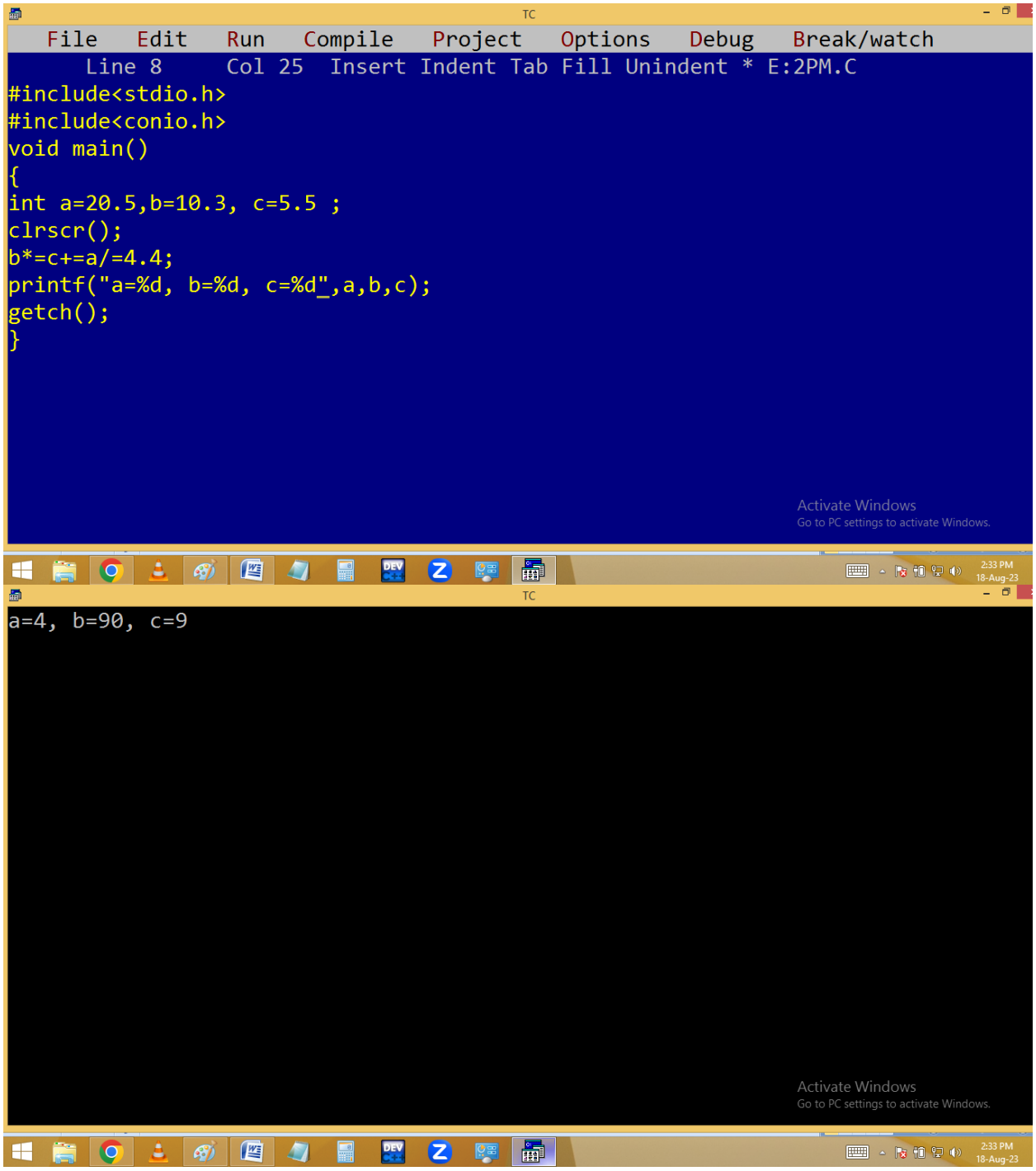
float c=5;

a+=4; i.e. a=a+4 ➔ a=3+4 ➔ a=7

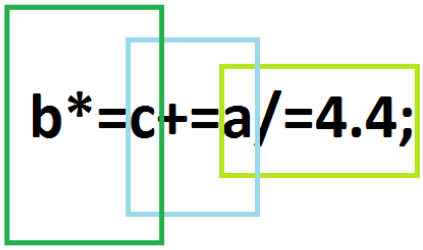
b*=3; i.e. b=b*3 ➔ b=10*3➔b=30

c/=2; i.e. c=c/2 ➔ c=5/2 ➔ 2.500000

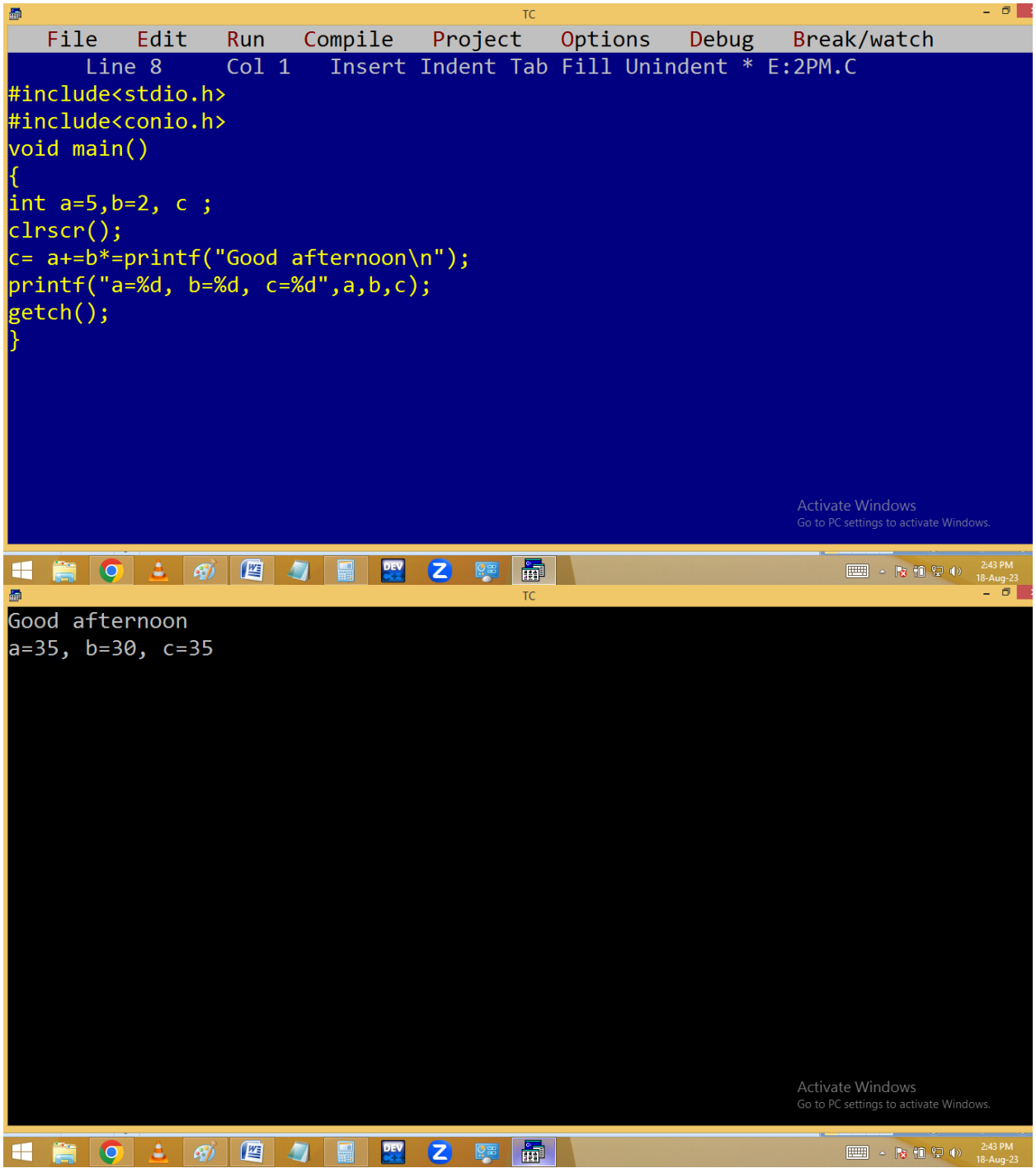

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 32 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=3,b=10 ;
float c=5;
clrscr();
a+=4;
b*=3;
c/=2;
printf("a=%d, b=%d, c=%f",a,b,c);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
2:26 PM
18-Aug-23
TC
a=7, b=30, c=2.500000
Activate Windows
Go to PC settings to activate Windows.
2:27 PM
18-Aug-23


TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 25 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=20.5,b=10.3, c=5.5 ;
clrscr();
b*=c+=a/=4.4;
printf("a=%d, b=%d, c=%d",a,b,c);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
2:33 PM
18-Aug-23
TC
a=4, b=90, c=9
Activate Windows
Go to PC settings to activate Windows.
2:33 PM
18-Aug-23

int a=20.5 b=10.3 c=5.5



1. a=a/4 ==> 20/4.4=4.54
2. c+=a ==> 5+4=9
3. b=b*c ==> 10*9=90


TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=5,b=2, c ;
clrscr();
c= a+=b*=printf("Good afternoon\n");
printf("a=%d, b=%d, c=%d",a,b,c);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
2:43 PM
18-Aug-23
TC
Good afternoon
a=35, b=30, c=35
Activate Windows
Go to PC settings to activate Windows.
2:43 PM
18-Aug-23

a=5, b=2;

c= a+=b*=printf("Good Afternoon\n");

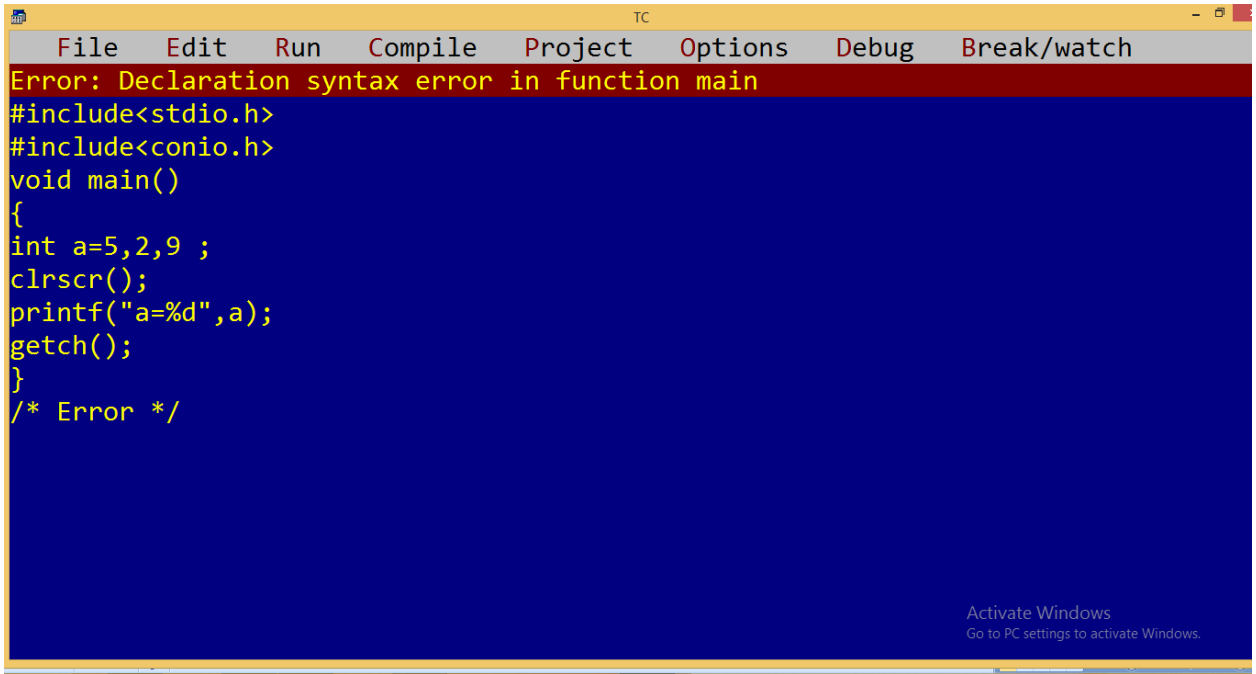
15

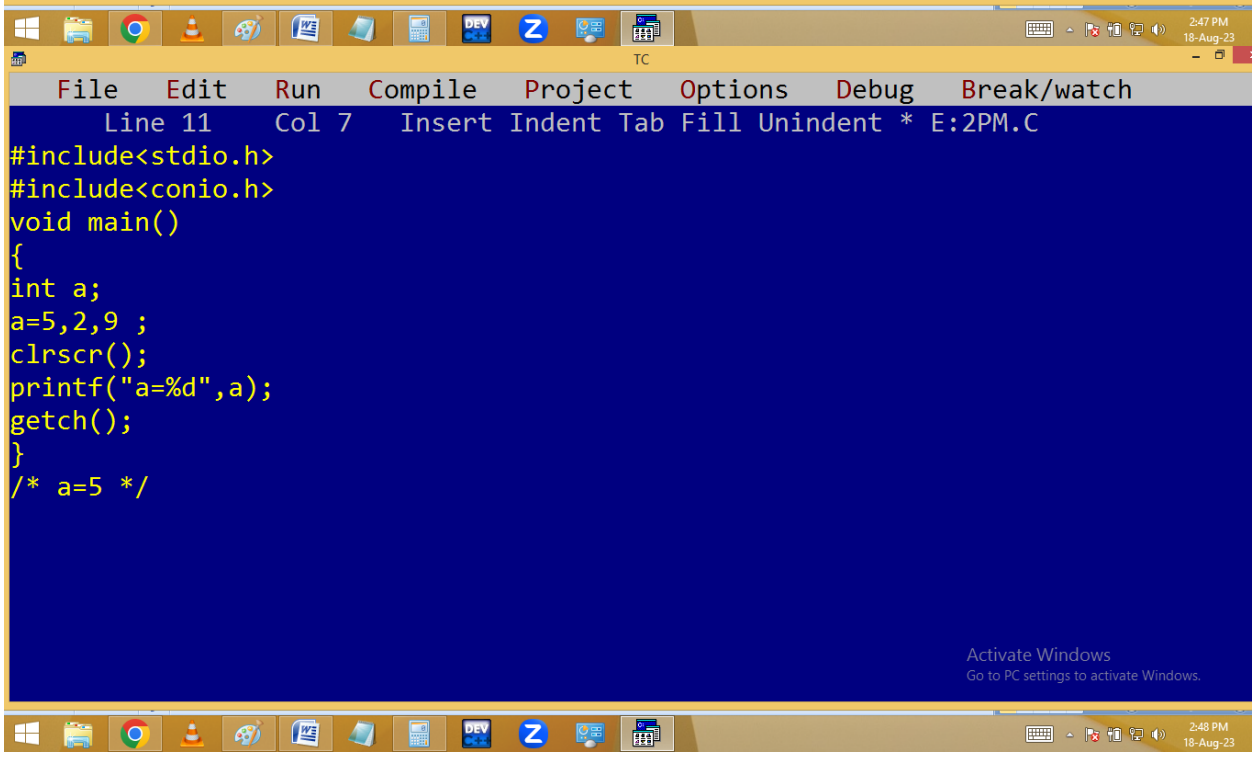
b*=15==>b=2*15=30

a+=b ==>a=5+30=35

c=35

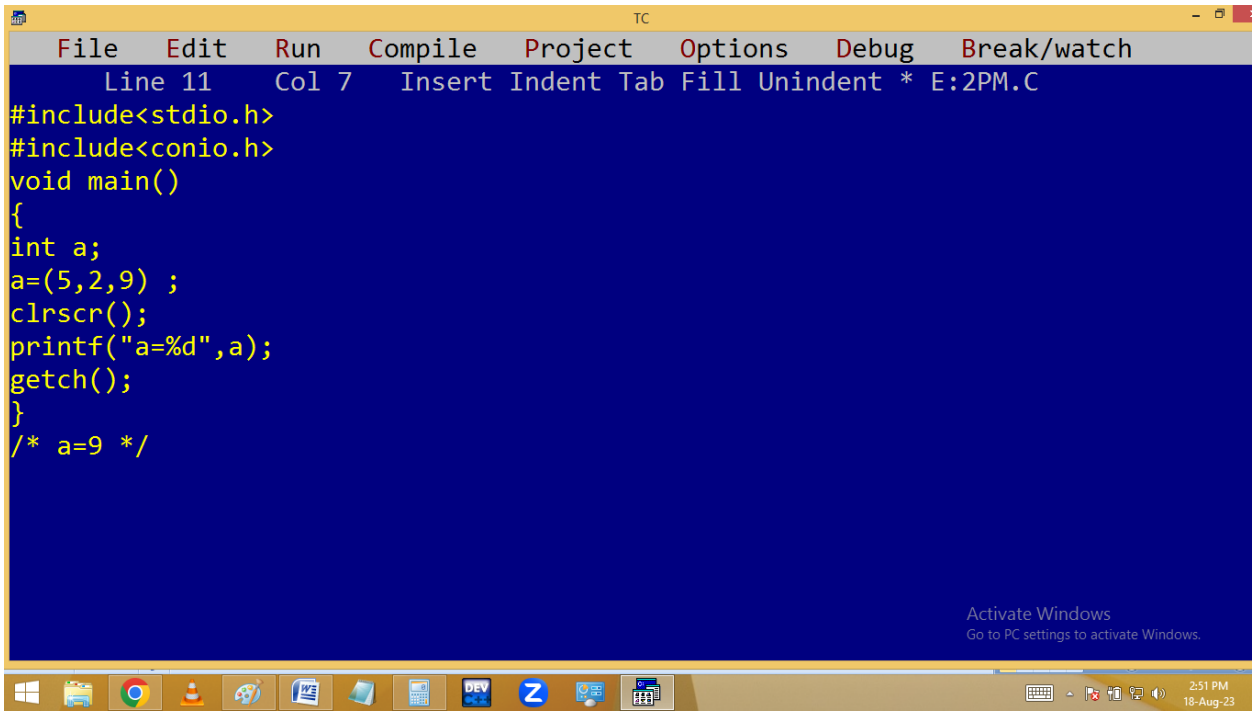
( ) and , separators:


TC
File Edit Run Compile Project Options Debug Break/watch
Error: Declaration syntax error in function main
#include<stdio.h>
#include<conio.h>
void main()
{
int a=5,2,9 ;
clrscr();
printf("a=%d",a);
getch();
}
/* Error */
Activate Windows
Go to PC settings to activate Windows.

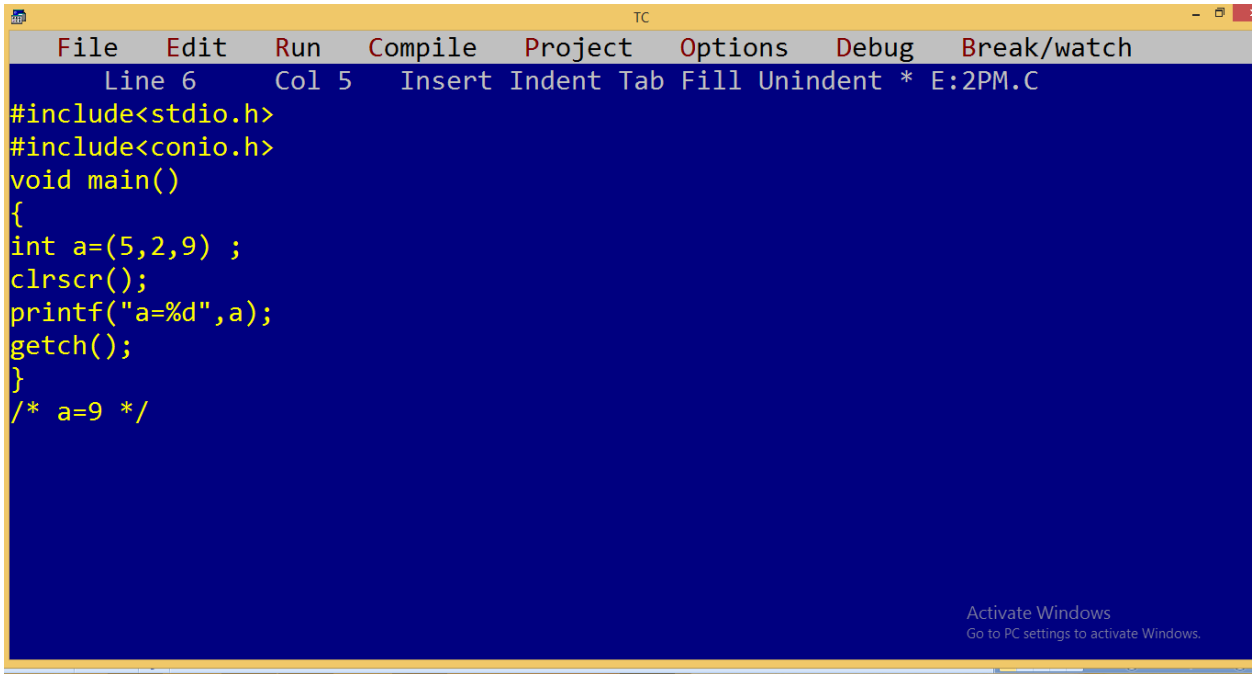

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 7 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
a=5,2,9 ;
clrscr();
printf("a=%d",a);
getch();
}
/* a=5 */
Activate Windows
Go to PC settings to activate Windows.

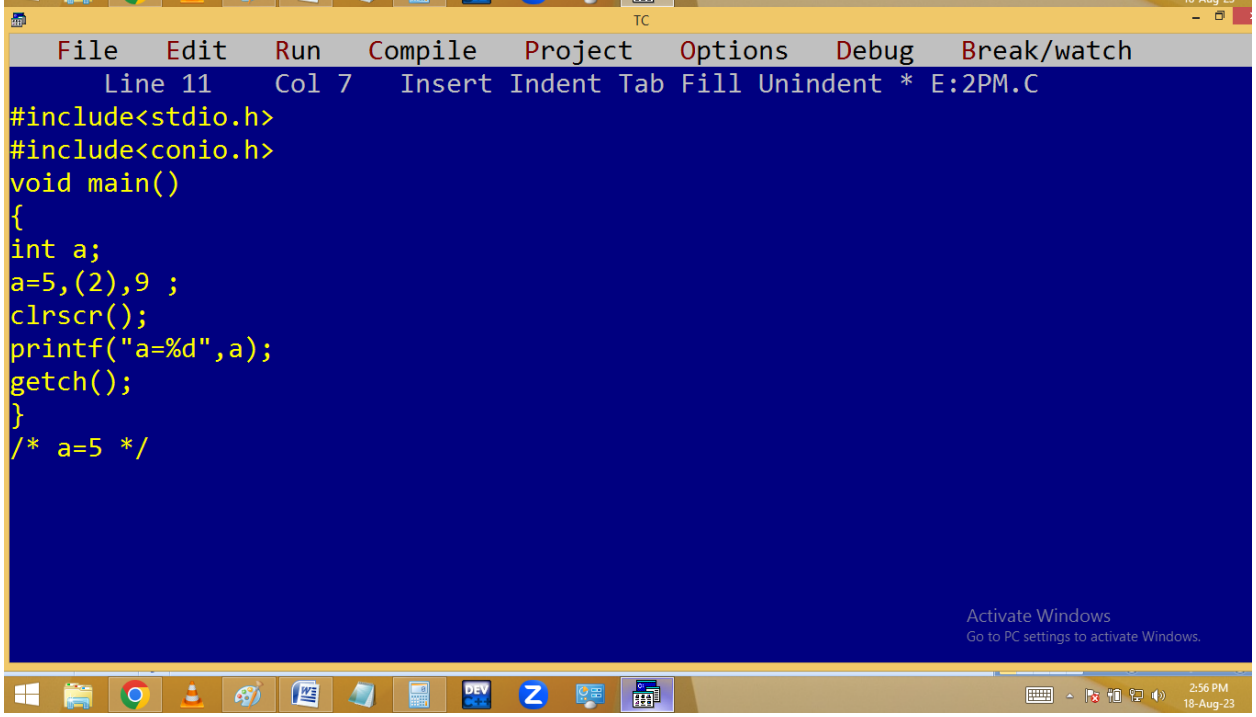
int a; /* declaration */

a=5, 2, 9; /* initialization */



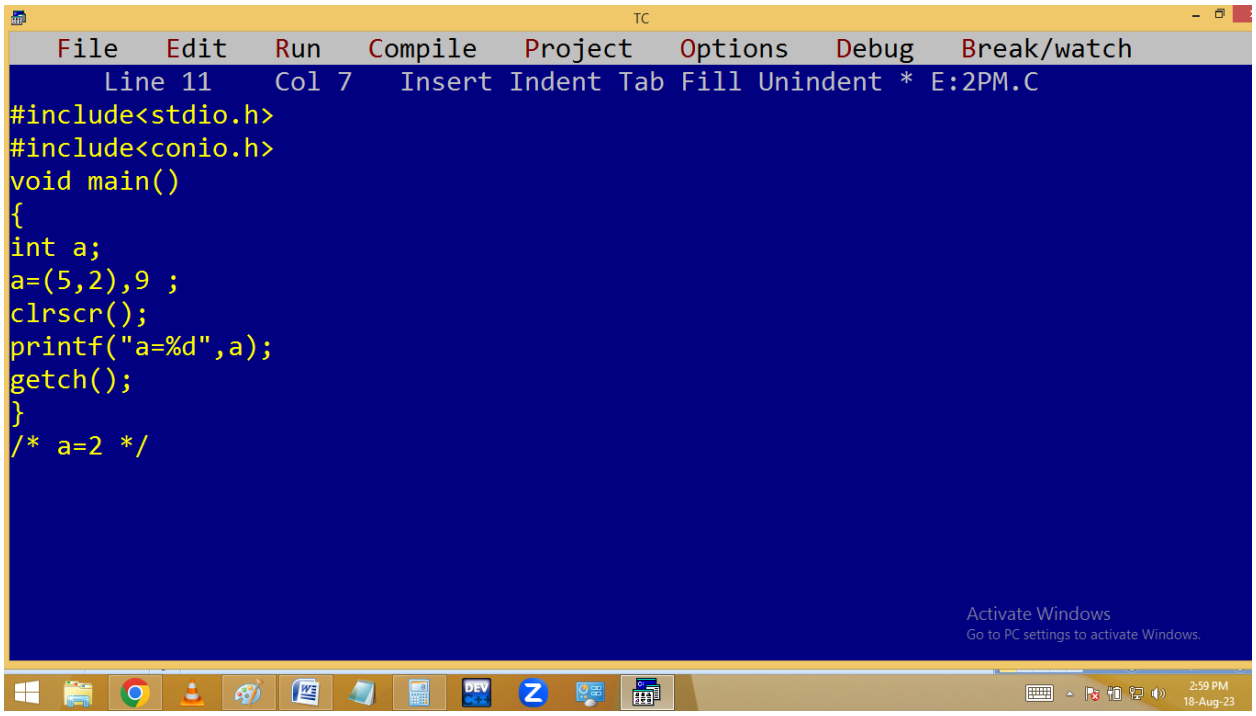

a = (5, 2, 9);
L
R
2
9
L
R
9

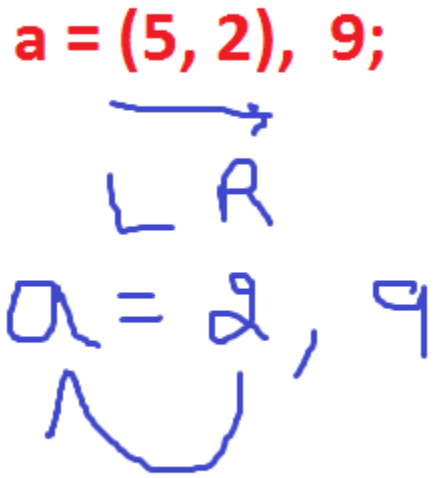

TC
File Edit Run Compile Project Options Debug Break/watch
Line 6 Col 5 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=(5,2,9) ;
clrscr();
printf("a=%d",a);
getch();
}
/* a=9 */
Activate Windows
Go to PC settings to activate Windows.
2:55 PM
18-Aug-23


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 7 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
a=5,(2),9 ;
clrscr();
printf("a=%d",a);
getch();
}
/* a=5 */
Activate Windows
Go to PC settings to activate Windows.
2:56 PM
18-Aug-23

a = 5 , (2) , 9;

a = 5 , 2, 9


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 7 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
a=(5,2),9 ;
clrscr();
printf("a=%d",a);
getch();
}
/* a=2 */
Activate Windows
Go to PC settings to activate Windows.
2:59 PM
18-Aug-23



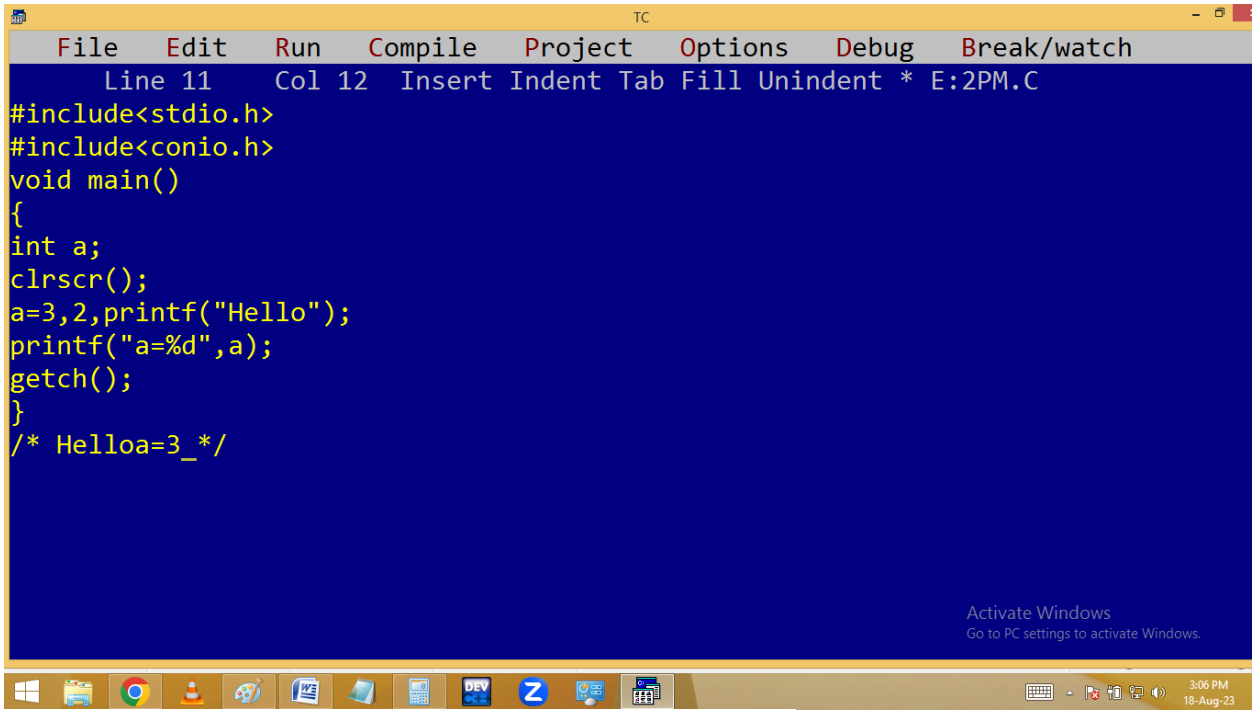
TC

File Edit Run Compile Project Options Debug Break/watch

Line 11 Col 12 Insert Indent Tab Fill Unindent * E:2PM.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
clrscr();
a=(5,2,printf("Hello")); ;
printf("a=%d",a);
getch();
}
/* Helloa=5 */
```


3:03 PM
18-Aug-23

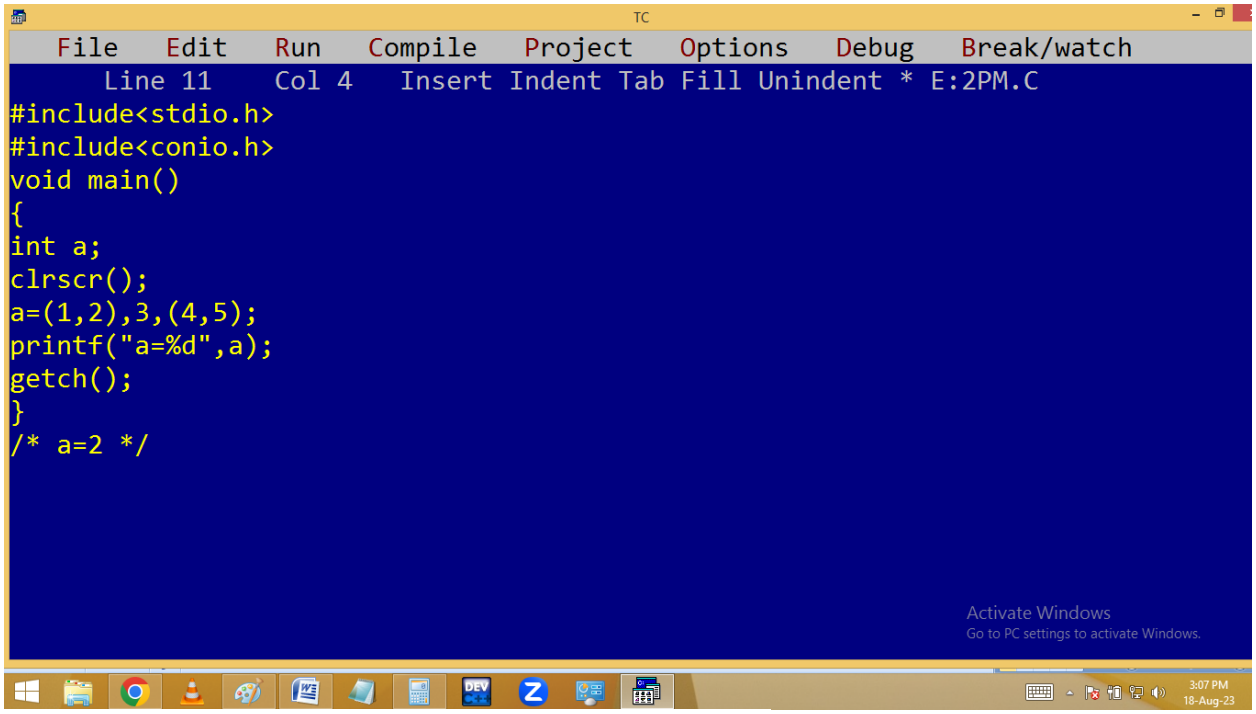


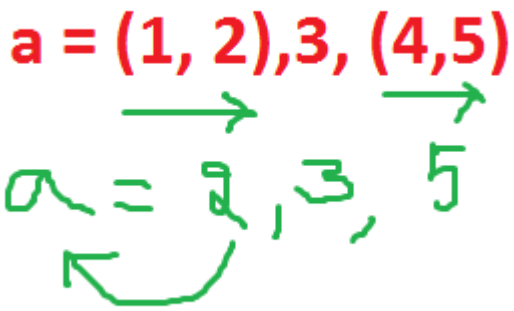
a = 3, 2, printf("Hello");

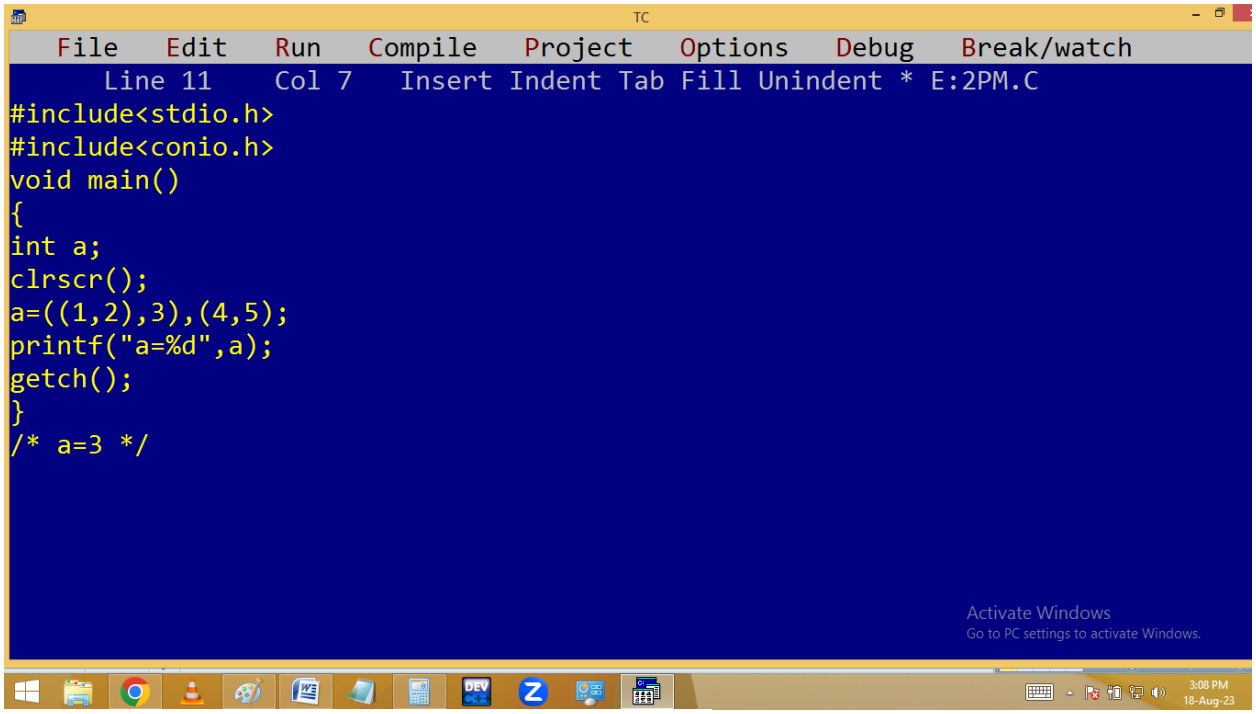
2 , 5

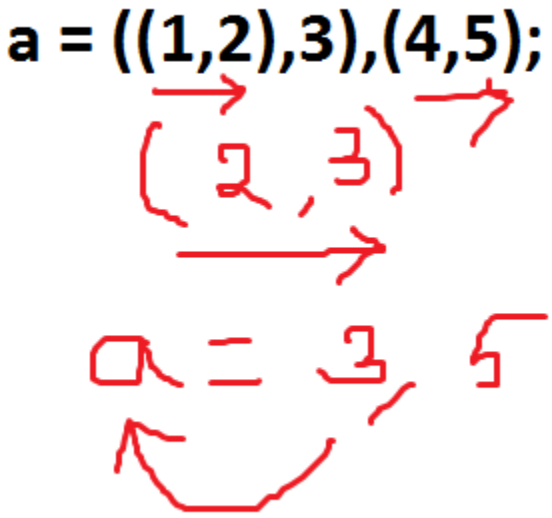
Hello

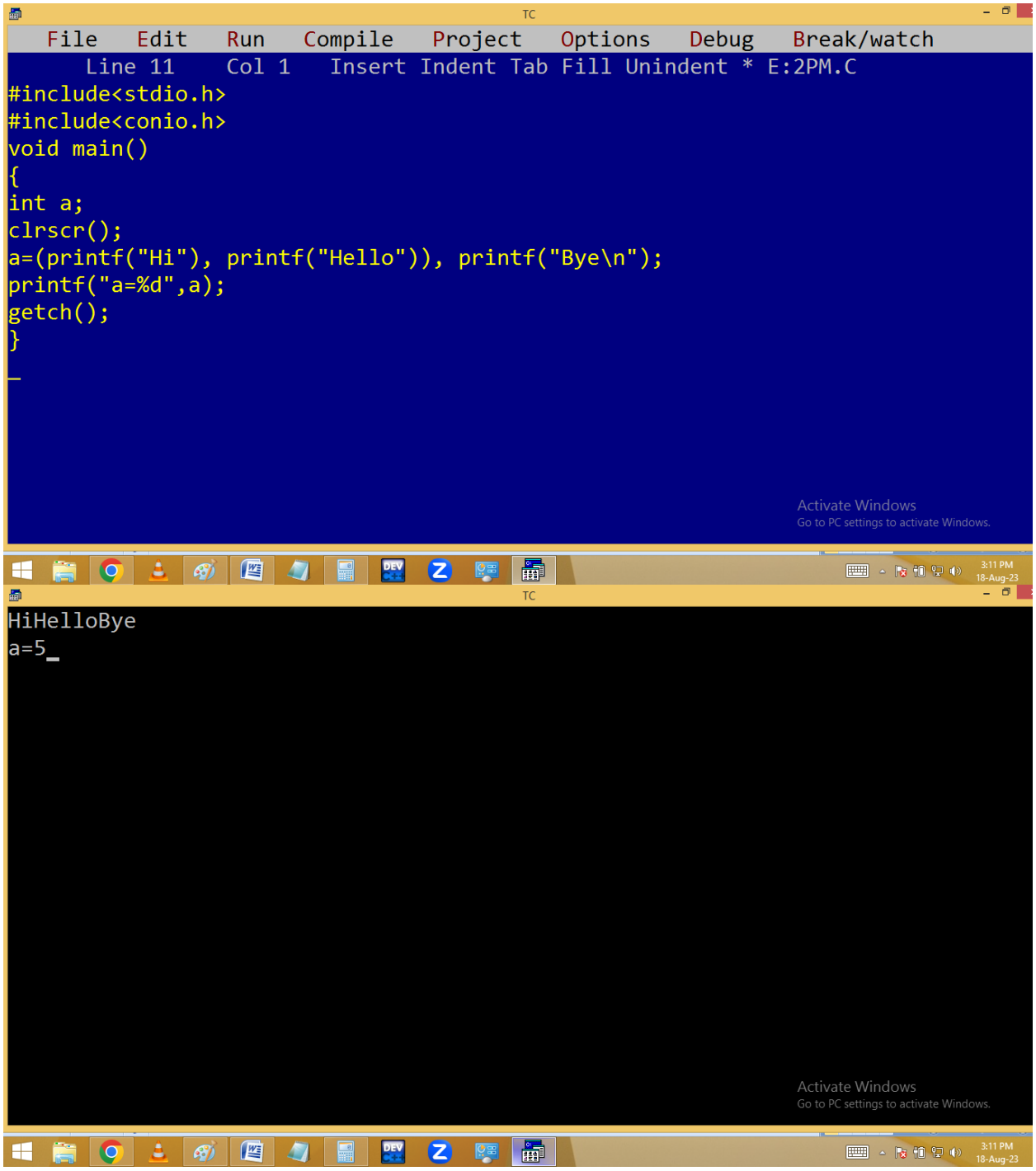
p("a=%d",a);

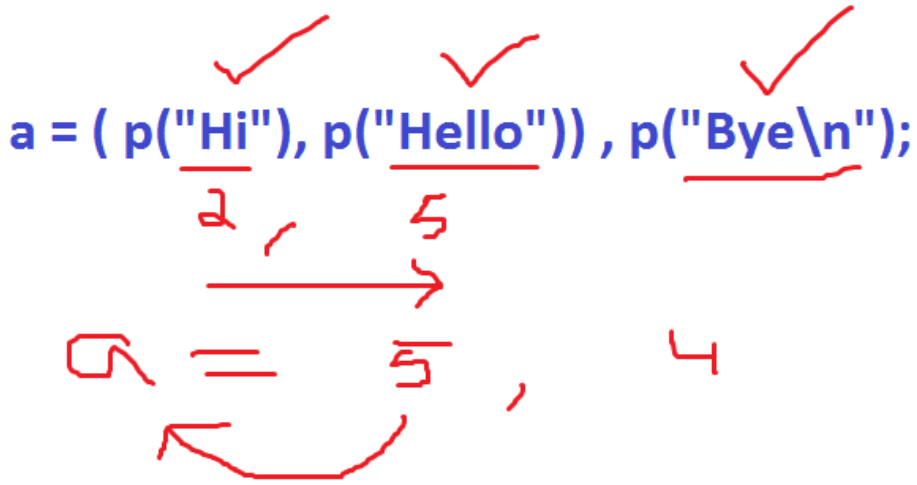

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 4 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
clrscr();
a=(1,2),3,(4,5);
printf("a=%d",a);
getch();
}
/* a=2 */
Activate Windows
Go to PC settings to activate Windows.
3:07 PM
18-Aug-23


a = (1, 2),3, (4,5)


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 7 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
clrscr();
a=((1,2),3),(4,5);
printf("a=%d",a);
getch();
}
/* a=3 */
Activate Windows
Go to PC settings to activate Windows.
3:08 PM
18-Aug-23

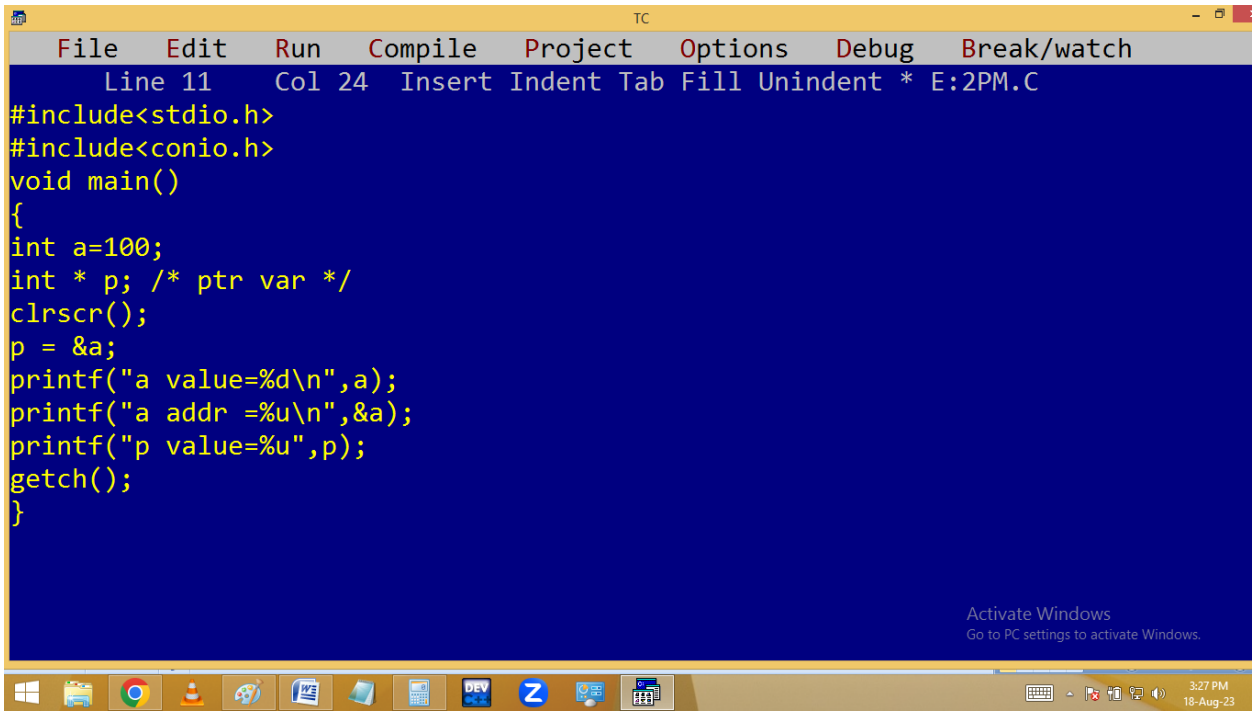

a = ((1,2),3),(4,5);
(2,3)
a = 3,5

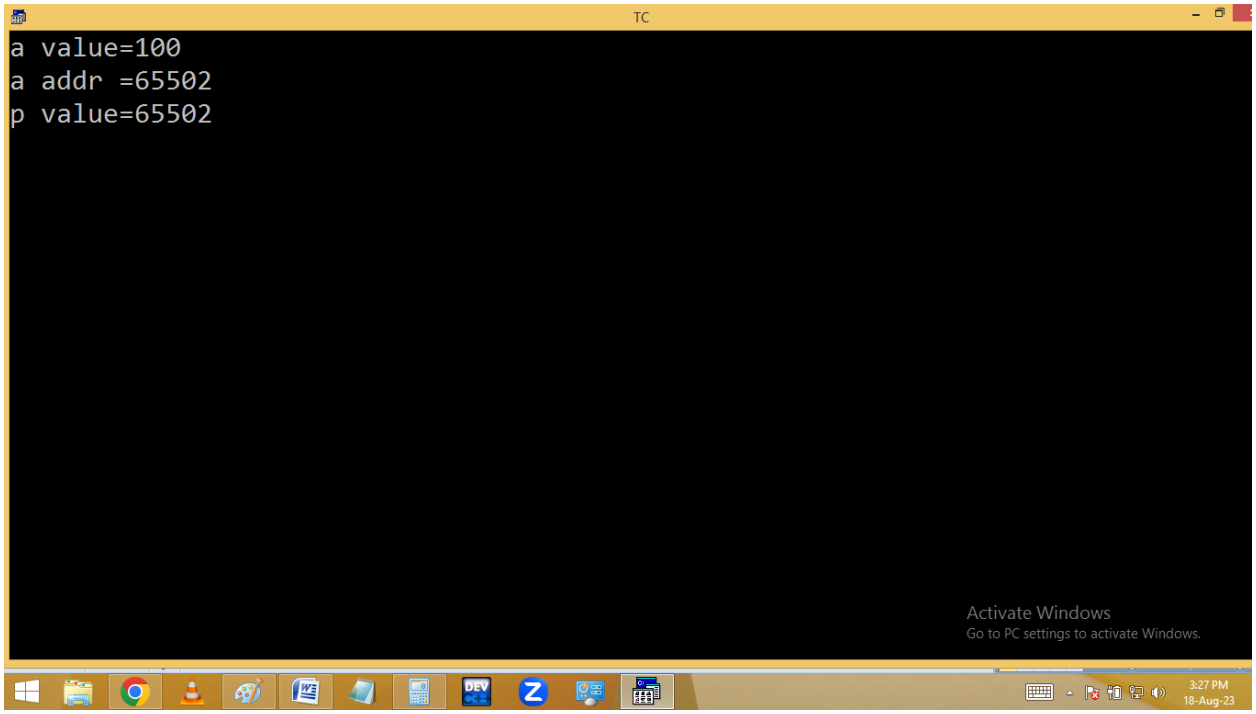

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
clrscr();
a=(printf("Hi"), printf("Hello")), printf("Bye\n");
printf("a=%d",a);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
3:11 PM
18-Aug-23
TC
HiHelloBye
a=5
Activate Windows
Go to PC settings to activate Windows.
3:11 PM
18-Aug-23



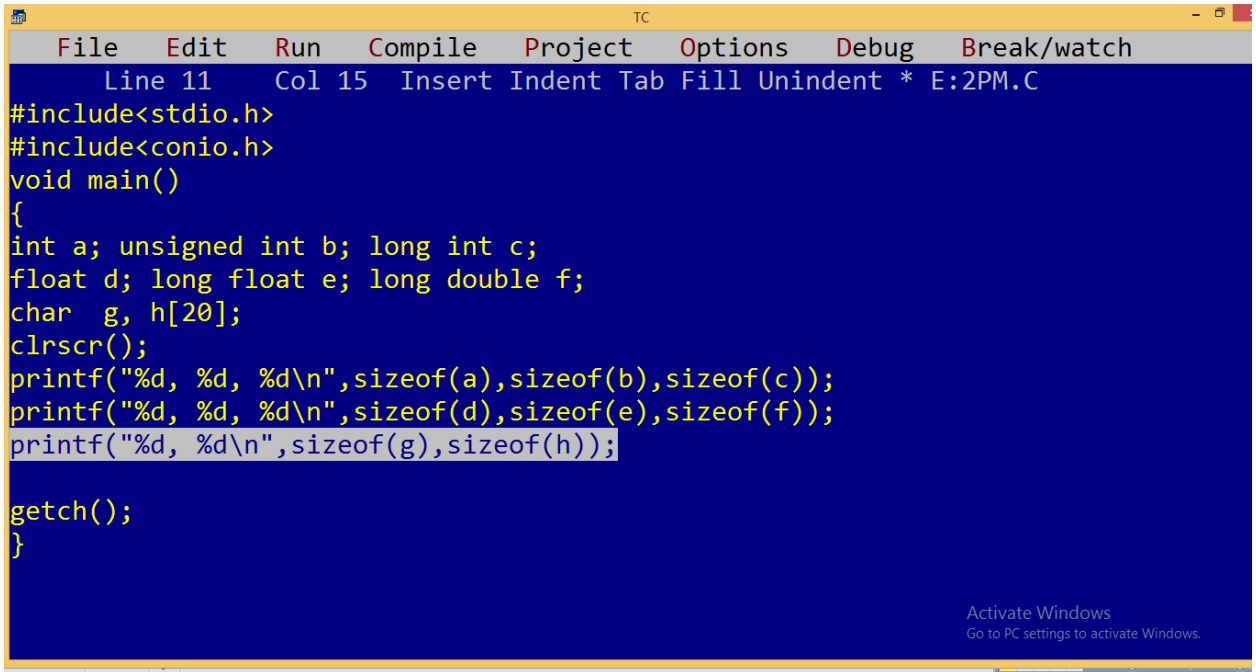
Address operators:

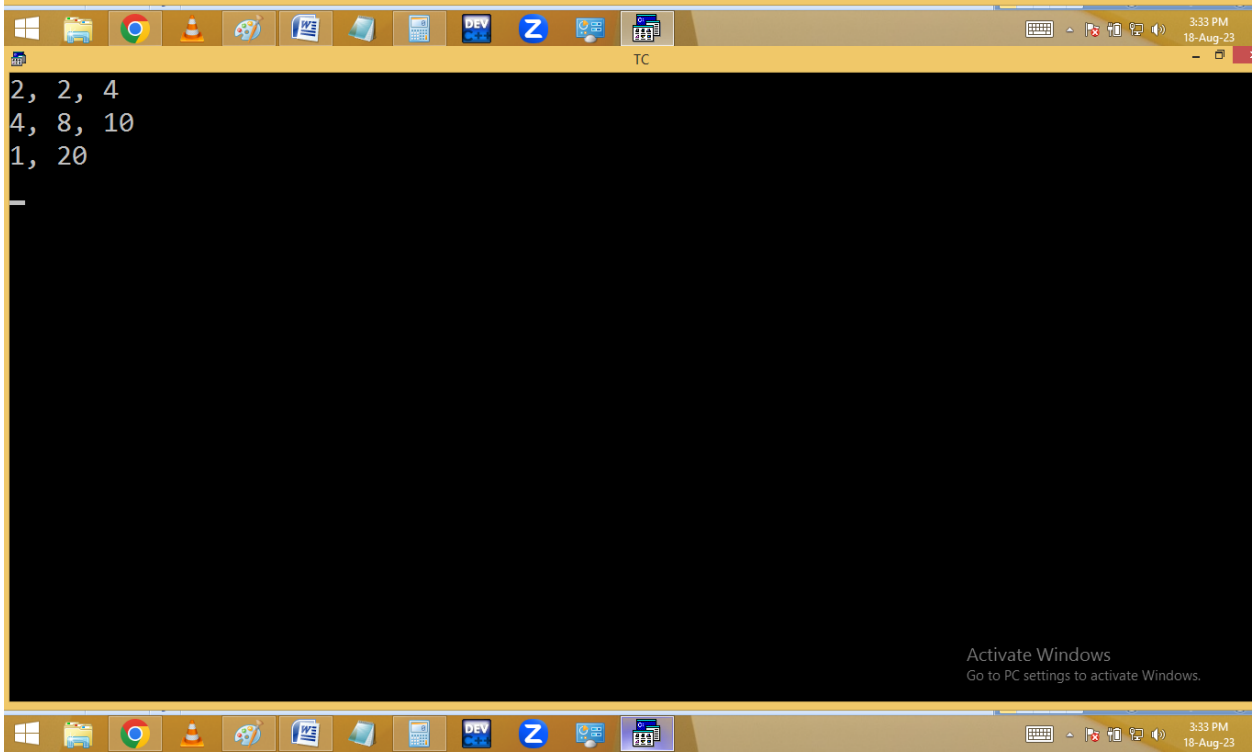
1. & - Address of variable / memory
2. * - pointer [Address of another variable]

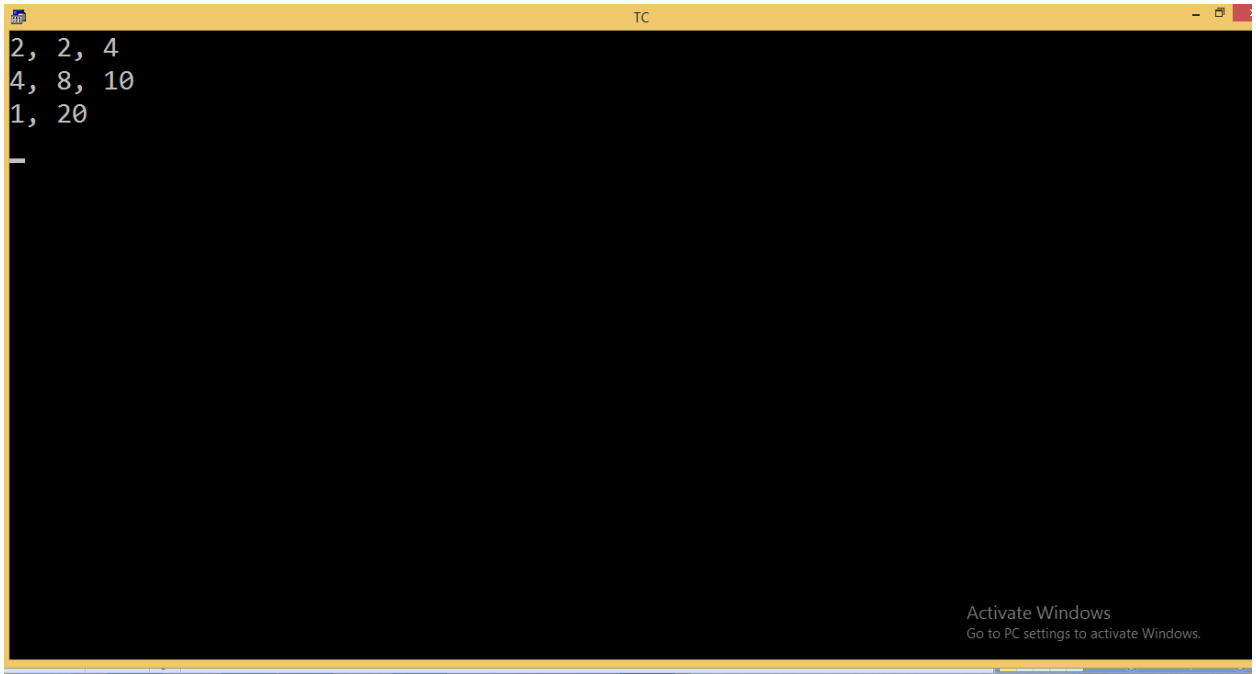


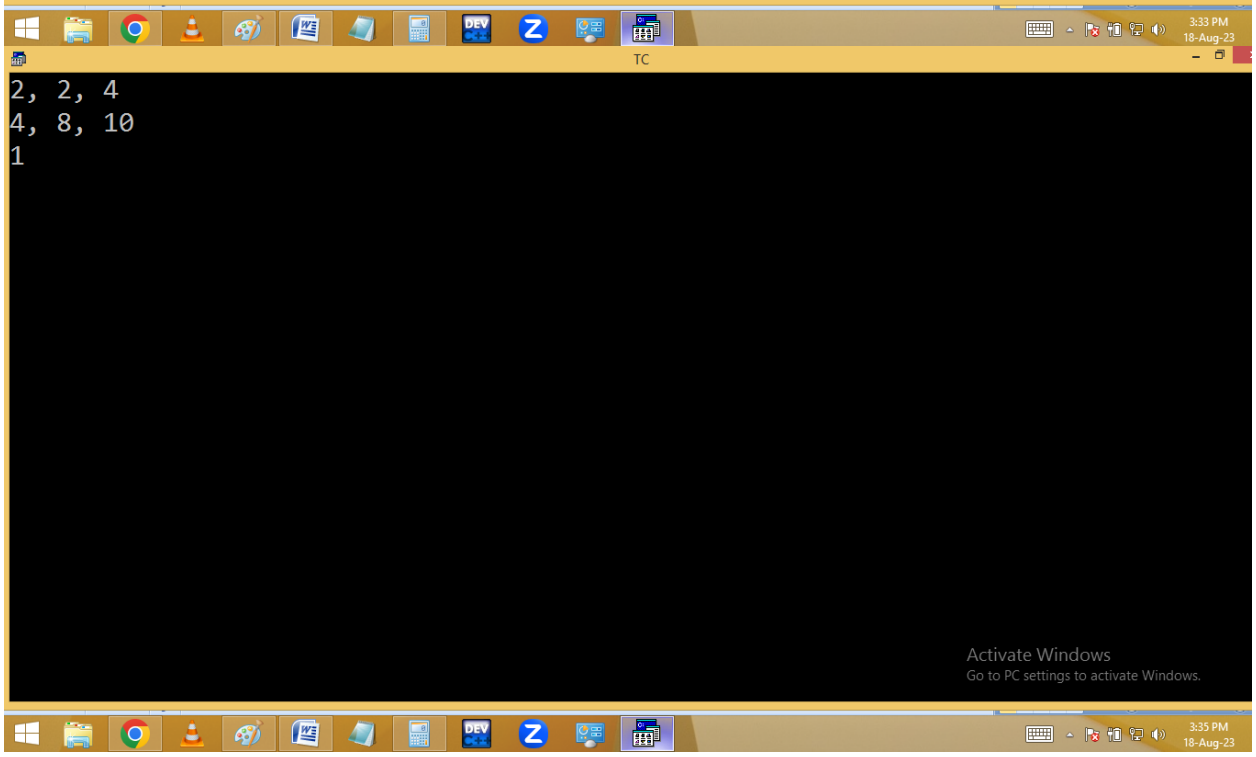


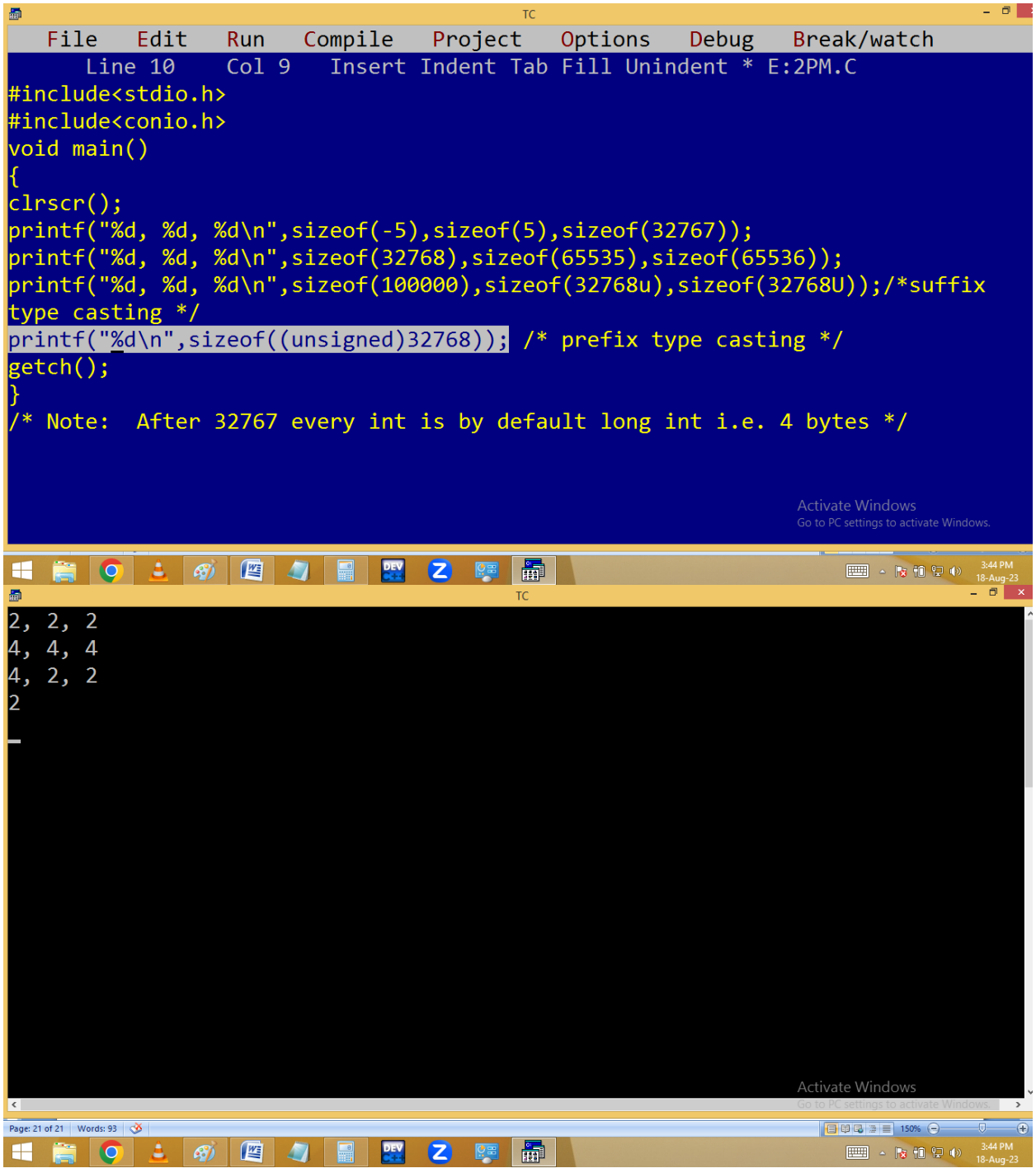
sizeof(): It return the no of bytes taken by a variable / data type / value.


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 15 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a; unsigned int b; long int c;
float d; long float e; long double f;
char g, h[20];
clrscr();
printf("%d, %d, %d\n",sizeof(a),sizeof(b),sizeof(c));
printf("%d, %d, %d\n",sizeof(d),sizeof(e),sizeof(f));
printf("%d, %d\n",sizeof(g),sizeof(h));
getch();
}
Activate Windows
Go to PC settings to activate Windows.


TC
2, 2, 4
4, 8, 10
1, 20
Activate Windows
Go to PC settings to activate Windows.


TC
2, 2, 4
4, 8, 10
1, 20
Activate Windows
Go to PC settings to activate Windows.


TC
2, 2, 4
4, 8, 10
1
Activate Windows
Go to PC settings to activate Windows.


TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 9 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d, %d, %d\n",sizeof(-5),sizeof(5),sizeof(32767));
printf("%d, %d, %d\n",sizeof(32768),sizeof(65535),sizeof(65536));
printf("%d, %d, %d\n",sizeof(100000),sizeof(32768u),sizeof(32768U));/*suffix
type casting */
printf("%d\n",sizeof((unsigned)32768)); /* prefix type casting */
getch();
}
/* Note: After 32767 every int is by default long int i.e. 4 bytes */
Activate Windows
Go to PC settings to activate Windows.
TC
2, 2, 2
4, 4, 4
4, 2, 2
2
Activate Windows
Page: 21 of 21 Words: 93
150%
3:44 PM
18-Aug-23