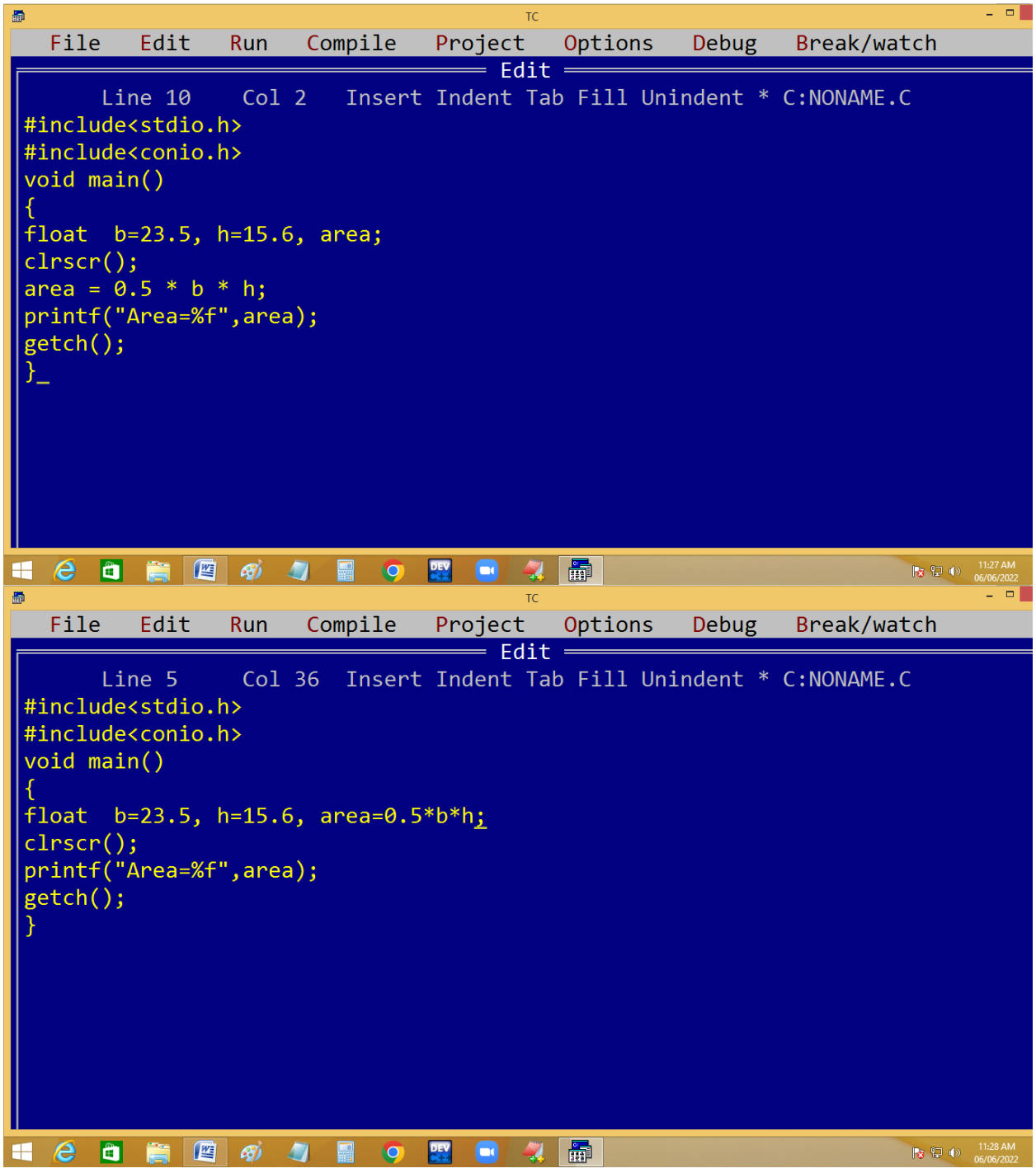
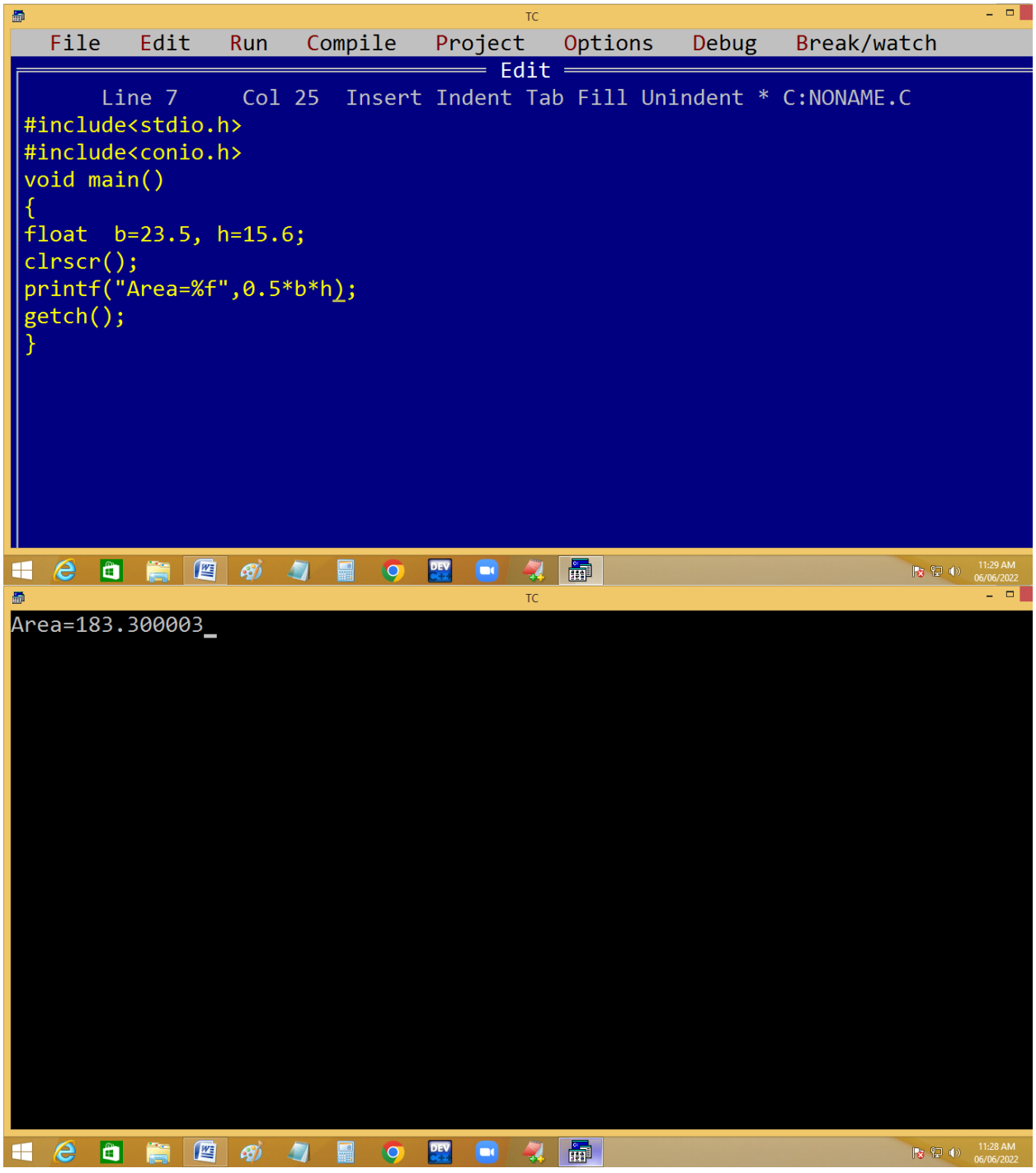
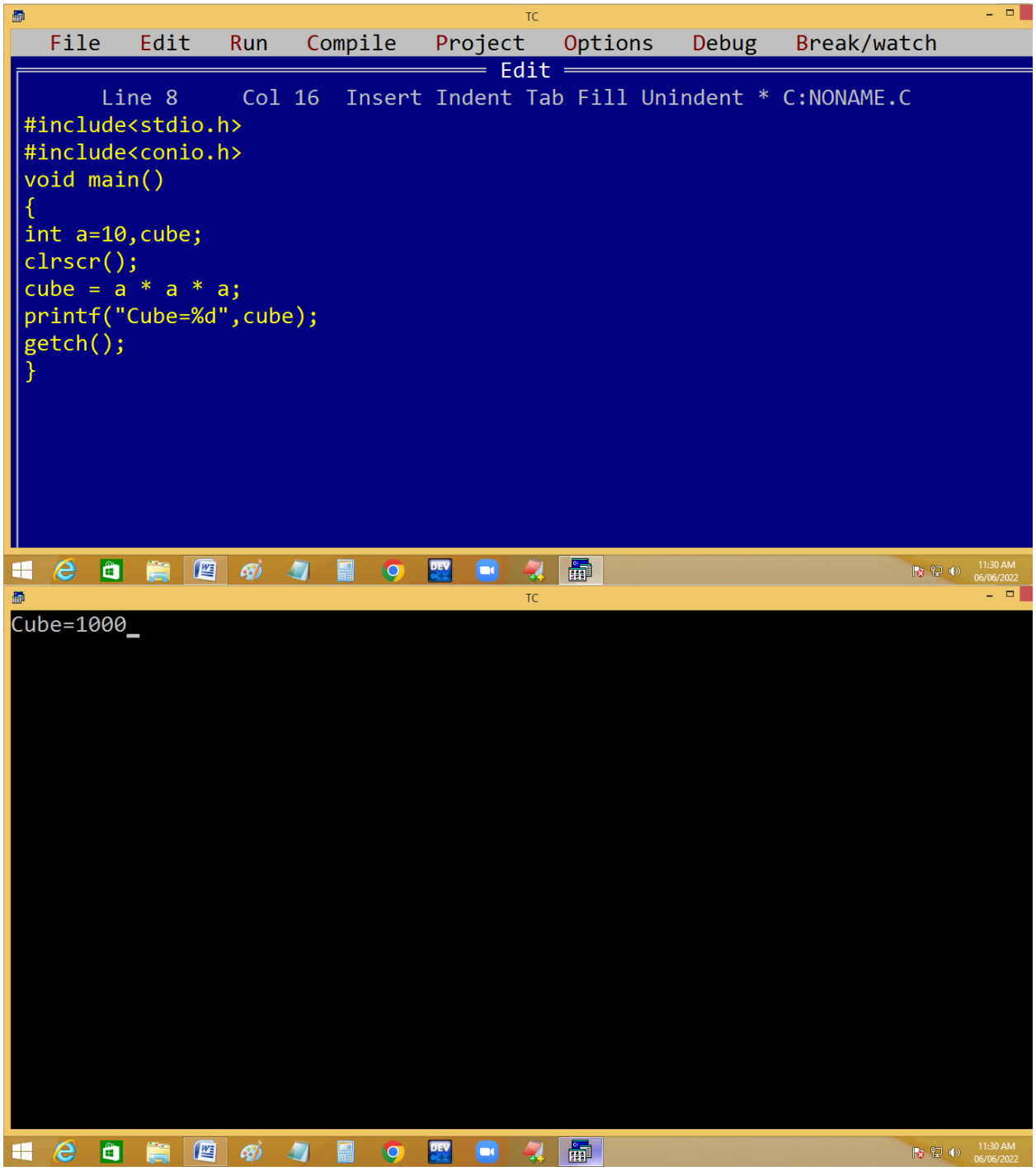
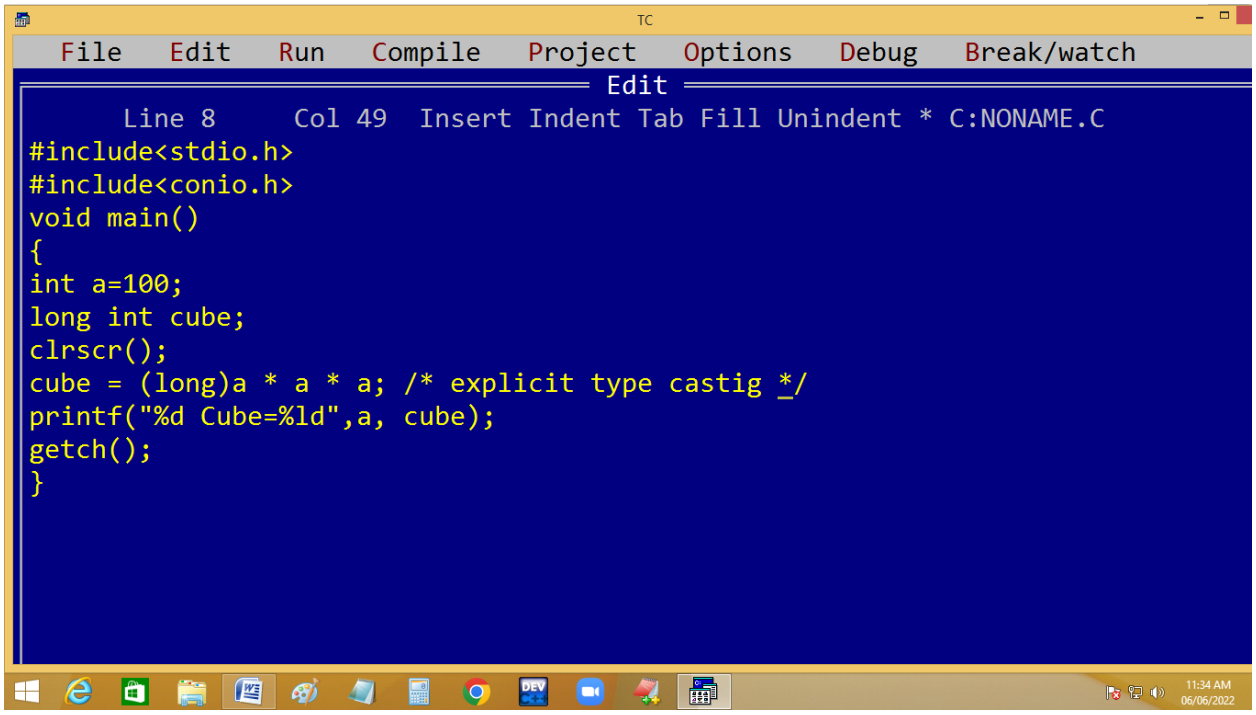
Finding area of a triangle.

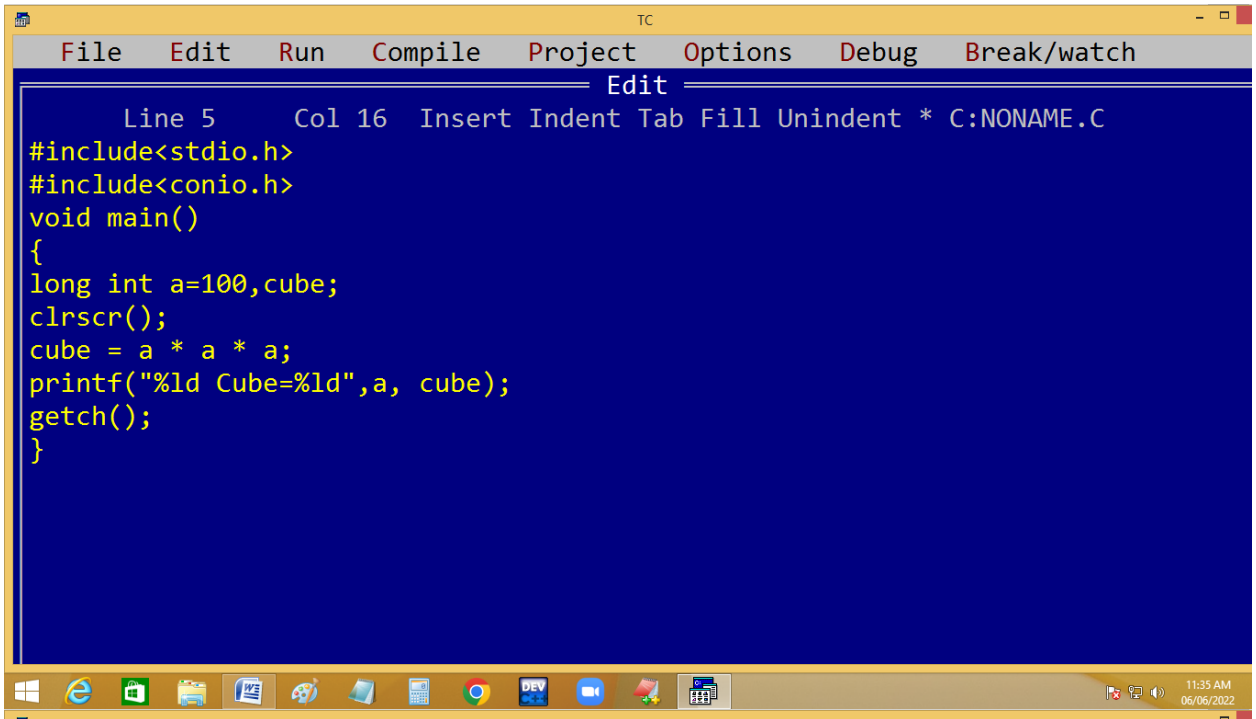


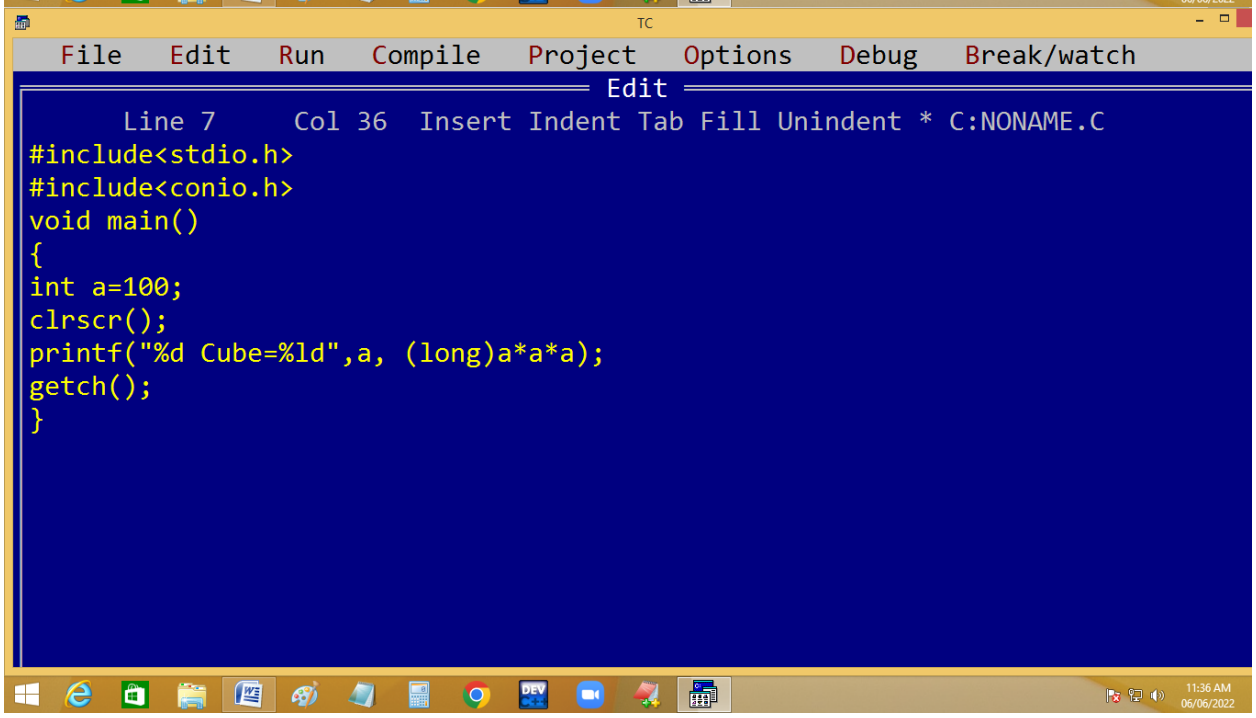

TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 7 Col 25 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
float b=23.5, h=15.6;
clrscr();
printf("Area=%f",0.5*b*h);
getch();
}
11:29 AM
06/06/2022
TC
Area=183.300003
11:28 AM
06/06/2022

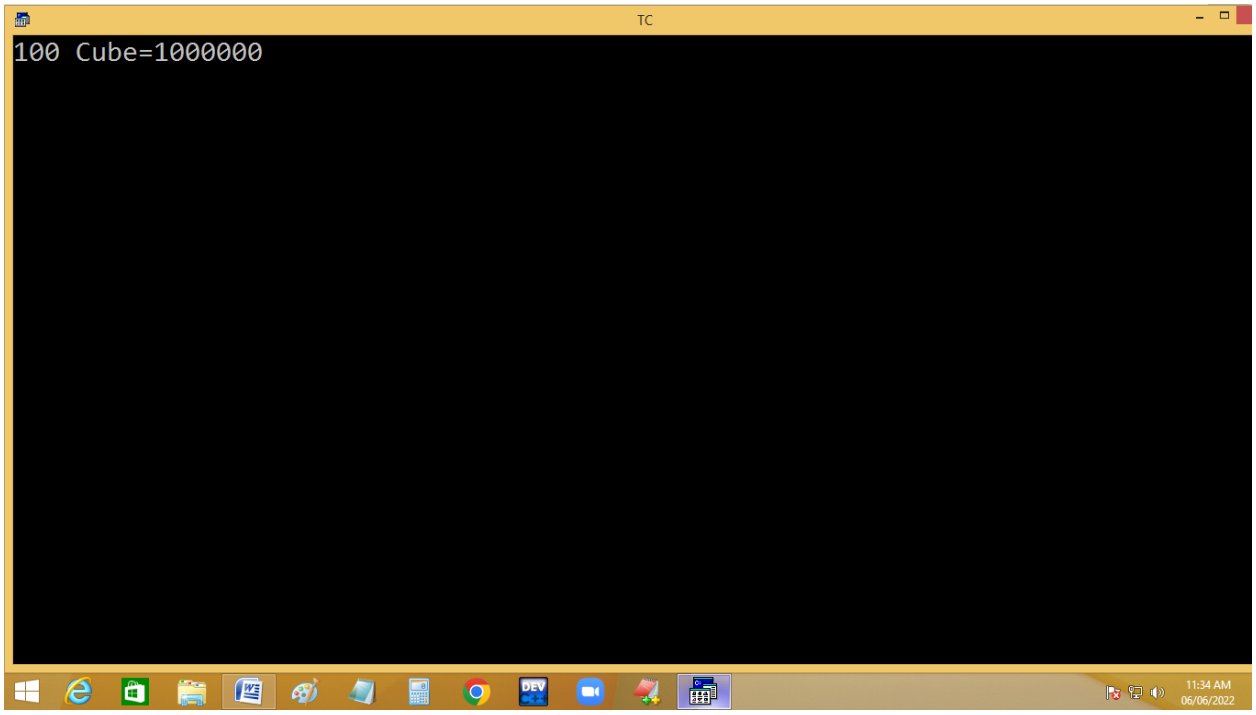
Finding cube value.




TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 8 Col 49 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=100;
long int cube;
clrscr();
cube = (long)a * a * a; /* explicit type castig */
printf("%d Cube=%ld",a, cube);
getch();
}
11:34 AM
06/06/2022

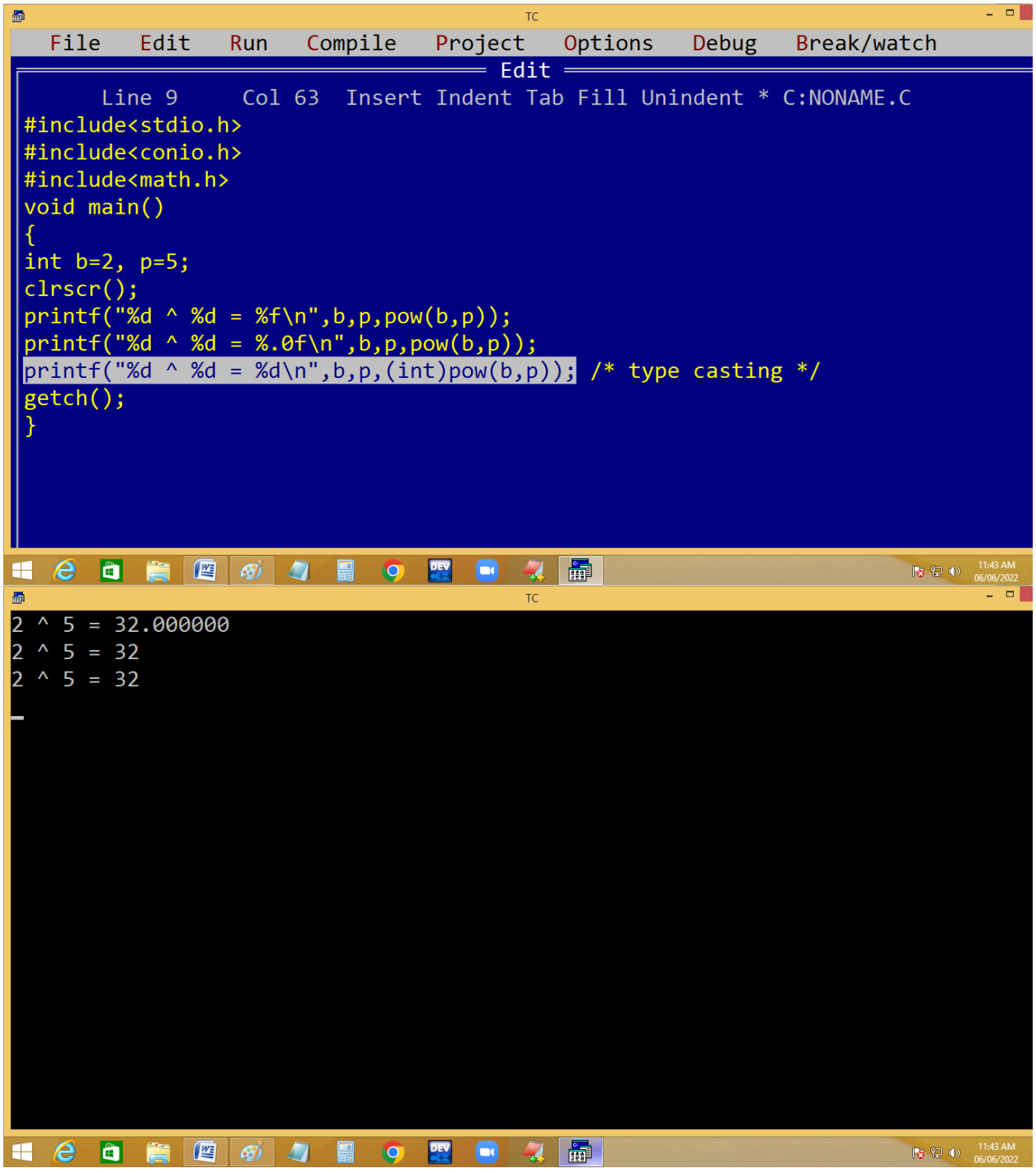

TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 5 Col 16 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
long int a=100,cube;
clrscr();
cube = a * a * a;
printf("%ld Cube=%ld",a, cube);
getch();
}
11:35 AM
06/06/2022


TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 7 Col 36 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=100;
clrscr();
printf("%d Cube=%ld",a, (long)a*a*a);
getch();
}
11:36 AM
06/06/2022

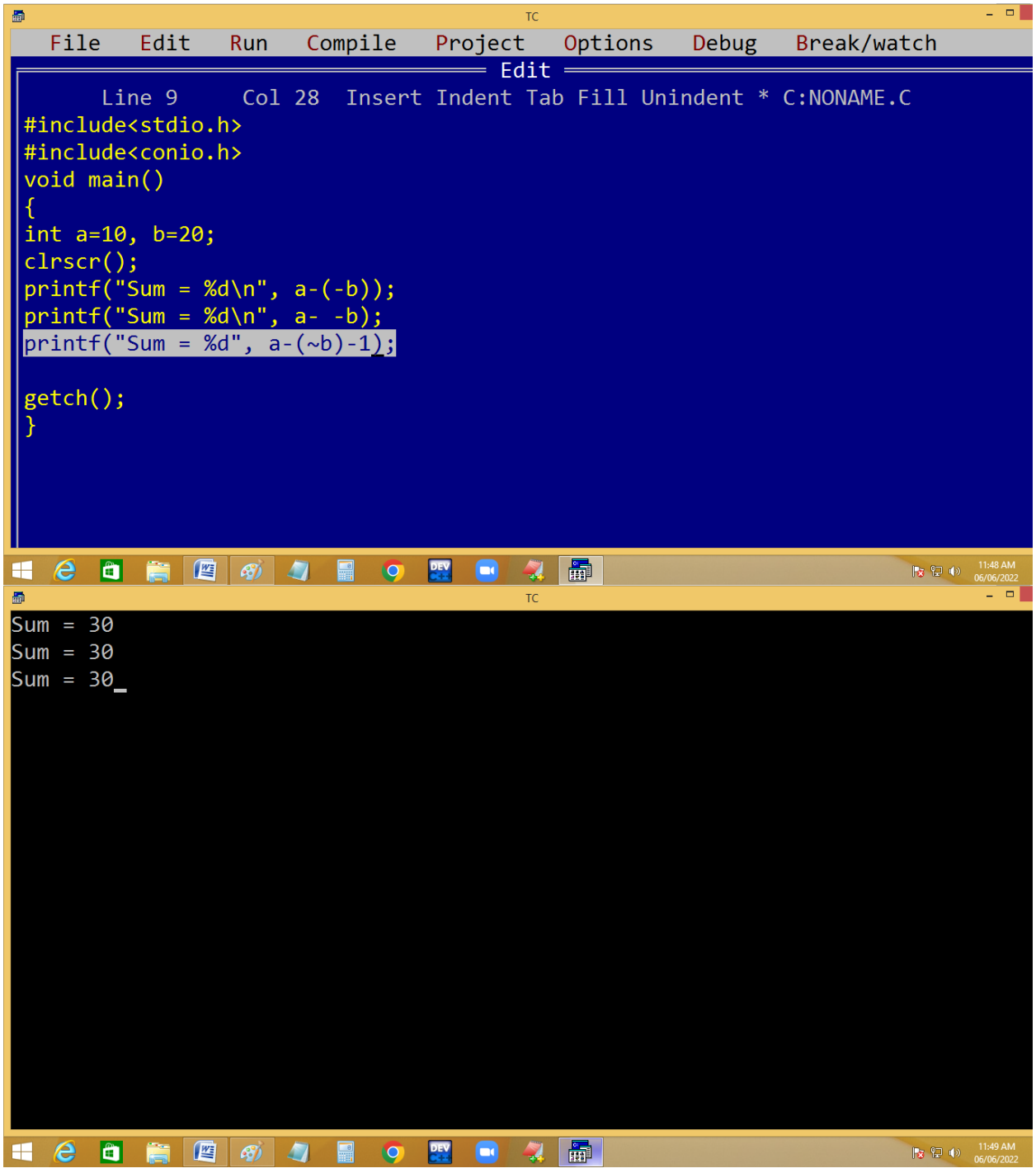


Eg. finding power value.

$2^5 = 32$


TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 9 Col 63 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
int b=2, p=5;
clrscr();
printf("%d ^ %d = %f\n",b,p,pow(b,p));
printf("%d ^ %d = %.0f\n",b,p,pow(b,p));
printf("%d ^ %d = %d\n",b,p,(int)pow(b,p)); /* type casting */
getch();
}
11:43 AM
06/06/2022
TC
2 ^ 5 = 32.000000
2 ^ 5 = 32
2 ^ 5 = 32
11:43 AM
06/06/2022

Eg. add two numbers without using + operator.


TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 9 Col 28 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=10, b=20;
clrscr();
printf("Sum = %d\n", a-(-b));
printf("Sum = %d\n", a- -b);
printf("Sum = %d", a-(~b)-1);
getch();
}
11:48 AM
06/06/2022
TC
Sum = 30
Sum = 30
Sum = 30
11:49 AM
06/06/2022

a-(~b)-1

10-(~20)-1

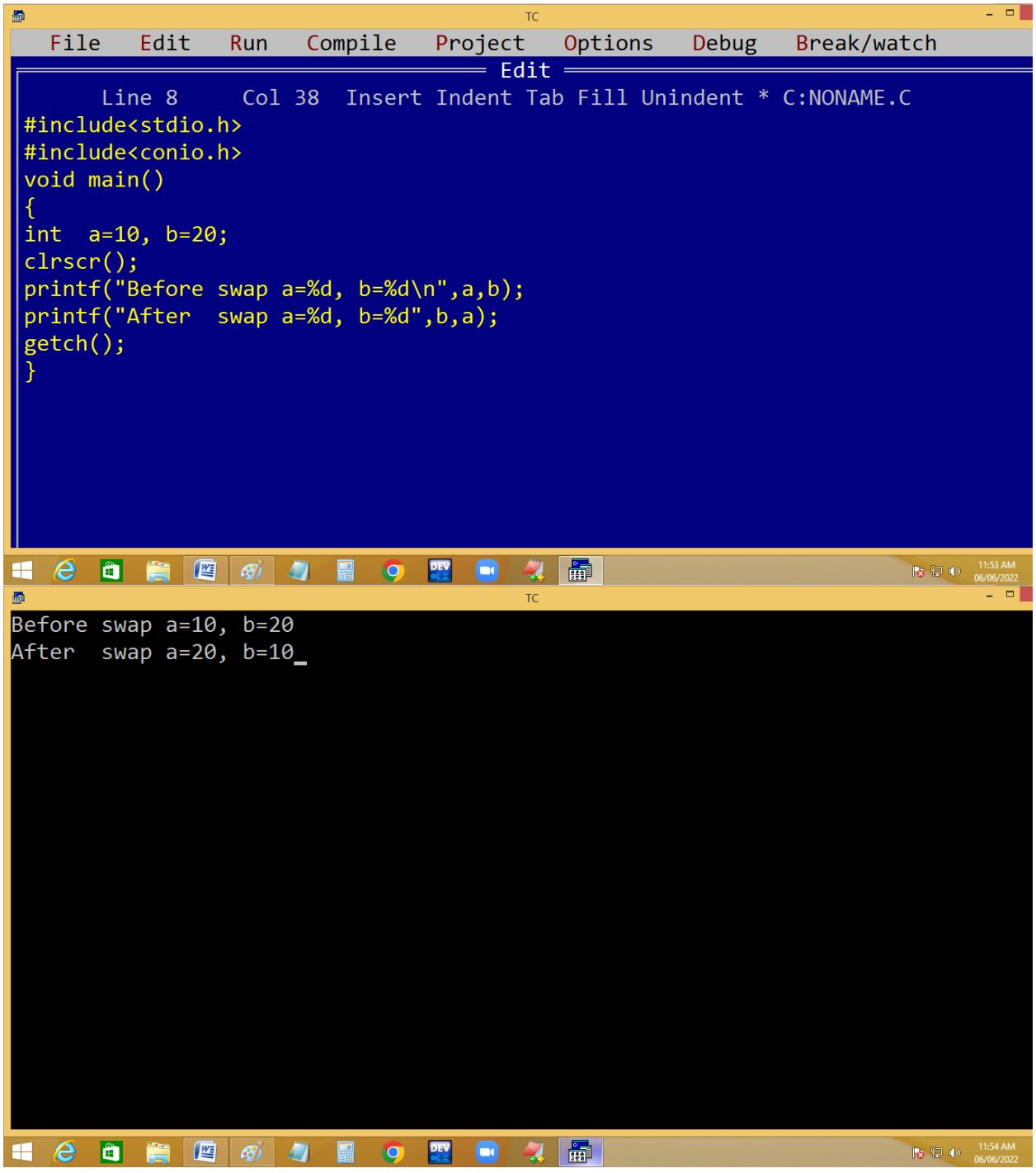
10-(-21)-1

10+21-1

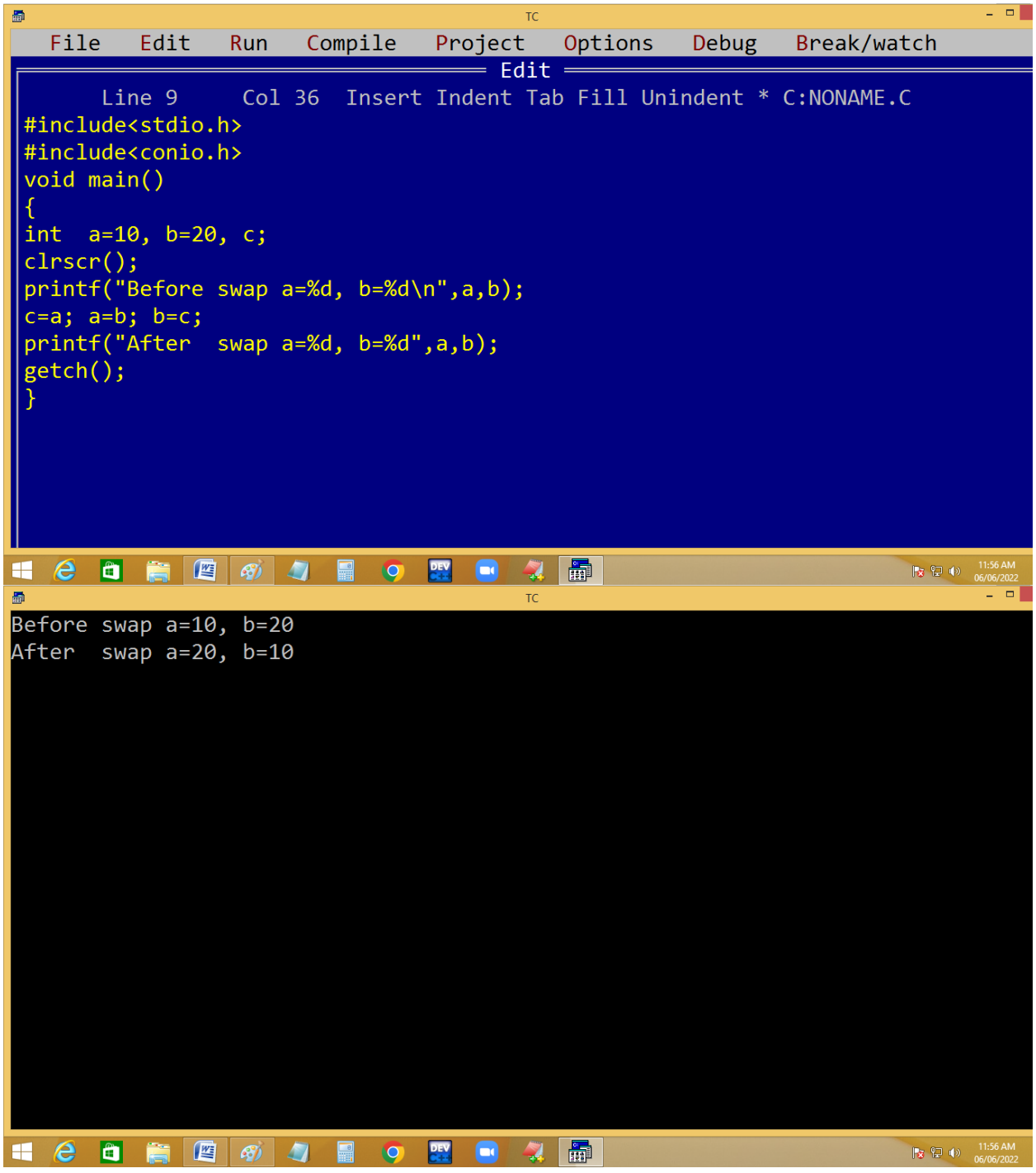
31-1=30

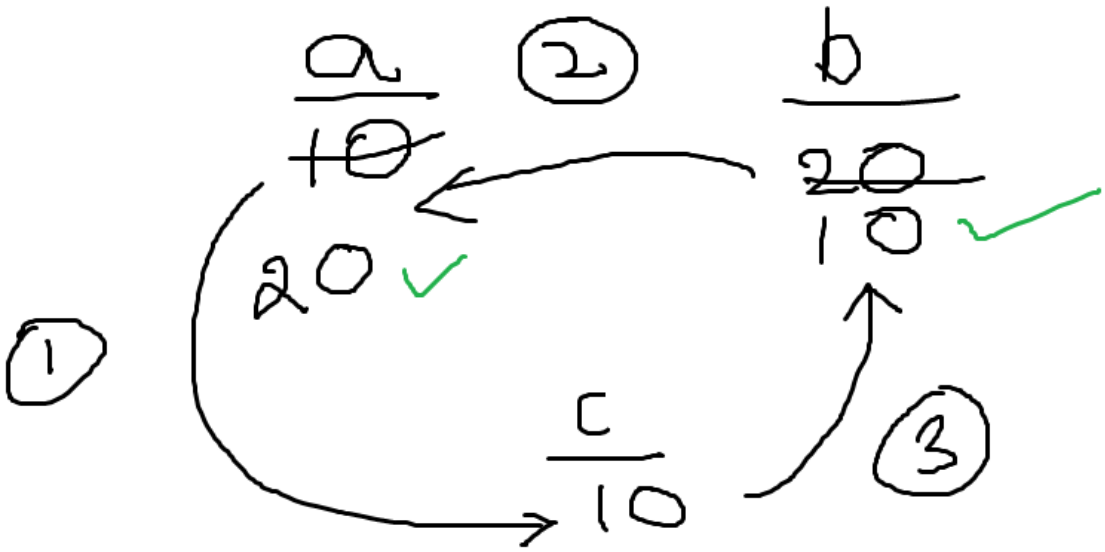
Swap of two numbers [interchange]:

Method 1 without using operators:


TC
File Edit Run Compile Project Options Debug Break/watch
Edit
Line 8 Col 38 Insert Indent Tab Fill Unindent * C:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a=10, b=20;
clrscr();
printf("Before swap a=%d, b=%d\n",a,b);
printf("After swap a=%d, b=%d",b,a);
getch();
}
11:53 AM
06/06/2022
TC
Before swap a=10, b=20
After swap a=20, b=10
11:54 AM
06/06/2022

Method 2: using 3rd variable.





Method 3: without using 3rd variable.

TC

File Edit Run Compile Project Options Debug Break/watch

Edit

Line 10 Col 21 Insert Indent Tab Fill Unindent * C:NONAME.C

```
#include<stdio.h>
#include<conio.h>
void main()
{
int  a=10, b=20;
clrscr();
printf("Before swap a=%d, b=%d\n",a,b);
/*a=a+b; b=a-b; a=a-b;
a=a*b; b=a/b; a=a/b; */
a=a^b; b=a^b; a=a^b;_
printf("After  swap a=%d, b=%d",a,b);
getch();
}
```

11:58 AM
06/06/2022

a=10 20 20

b=20 10

a=a+b==>10+20=30

b=a-b==>30-20=10

a=a-b==>30-10=20

a=10 ২০ ২০

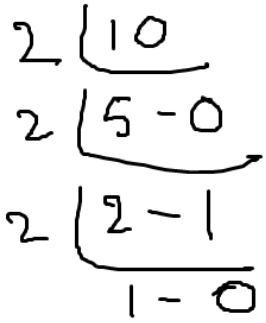
b=20 ১০

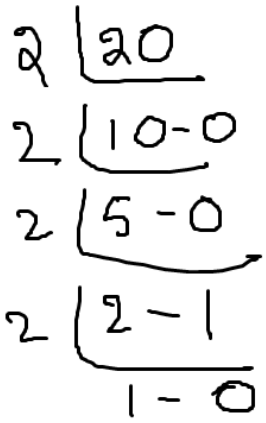
a=a*b==>10*20=200

b=a/b==>200/20=10

a=a/b==>200/10=20

a = 10 ==> 1010
b = 20 ==> 10100





a=10, b=20

a = a ^ b;

a=10==> 01010
b=20==>10100
11110=30

$2^4+2^3+2^2+2^1$

16+8+4+2=30

a=30
b=20

a=30, b=20

b=a^b

a=30==>11110
b=20==>10100
01010=10

i.e. a=30, b=10

a=30, b=10

a=a^b

a=30==>11110
b=10==>01010
10100=20

i.e. a=20, b=10