Top window:

```
Start here    Untitled3.c
     1    #include <stdio.h>
     2    int main (void)
     3    {
     4    int a = 25, b = 5, c = 10, d = 7;
     5    printf ("a = %i, b = %i, c = %i, and d = %i\n", a, b, c, d);
     6    printf ("a %% b = %i\n", a % b);
     7    printf ("a %% b = %i\n", a % c);
     8    printf ("a %% b = %i\n", a % d);
     9    printf ("a / d * d + a %% d = %i\n", a / d * d + a % d);
    10
    11    return 0;
    12
    13
    14
    15    }
    16
```

Terminal output (top):
```
D:\6813134\Untitled3.exe
a = 25, b = 5, c = 10, and d = 7
a % b = 0
a % b = 5
a % b = 4
a / d * d + a % d = 25

Process returned 0 (0x0)   execution time : 0.012 s
Press any key to continue.
```

Logs & others
Code::Blocks   Search results   Cccc   Build log   Build messages   CppCheck/Vera

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 2 second(s)) ===

Bottom window:

```
Start here    Untitled3.c
     1    #include <stdio.h>
     2    int main (void)
     3    {
     4    int a = 95, b = 3, c = 75, d = 10;
     5    printf ("a = %i, b = %i, c = %i, and d = %i\n", a, b, c, d);
     6    printf ("a %% b = %i\n", a % b);
     7    printf ("a %% b = %i\n", a % c);
     8    printf ("a %% b = %i\n", a % d);
     9    printf ("a / d * d + a %% d = %i\n", a / d * d + a % d);
    10
    11    return 0;
    12
    13
    14
    15    }
    16
```
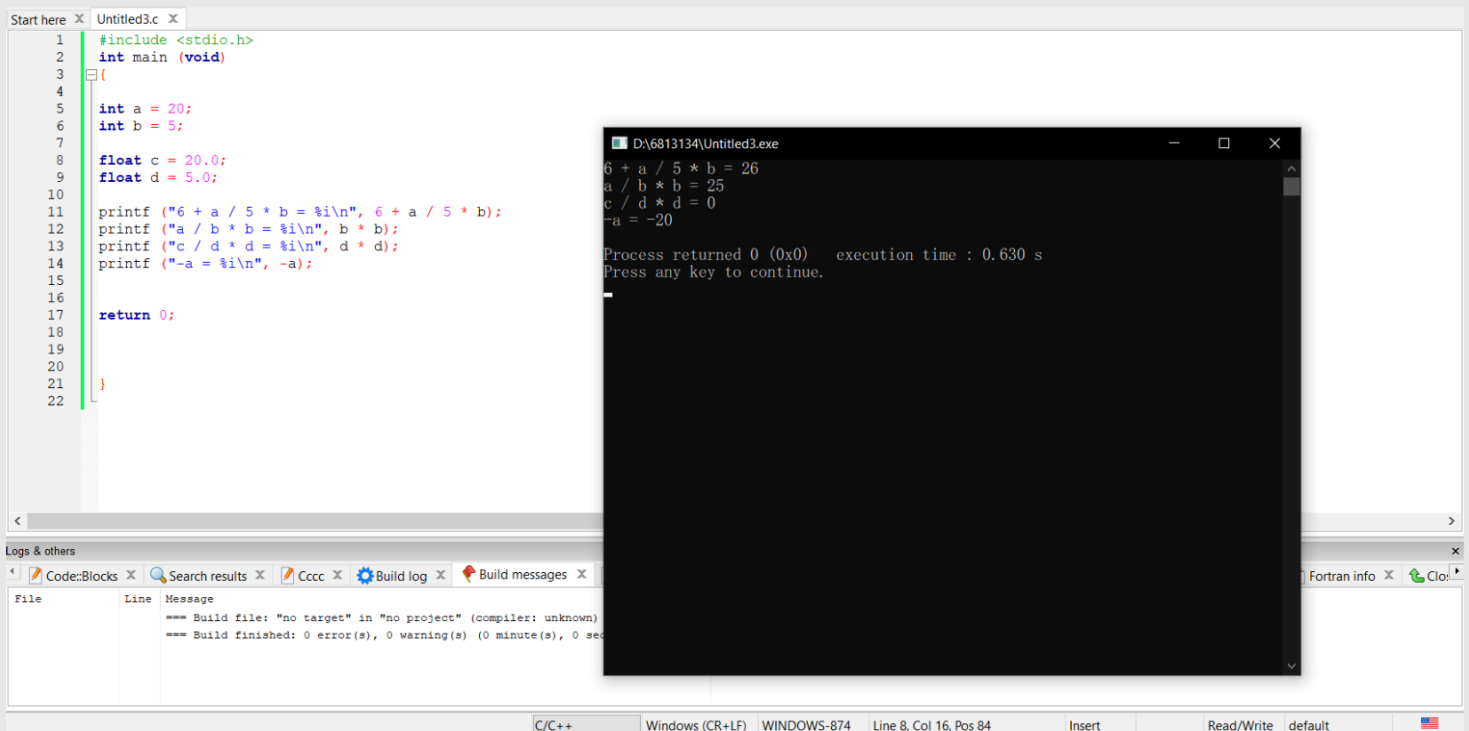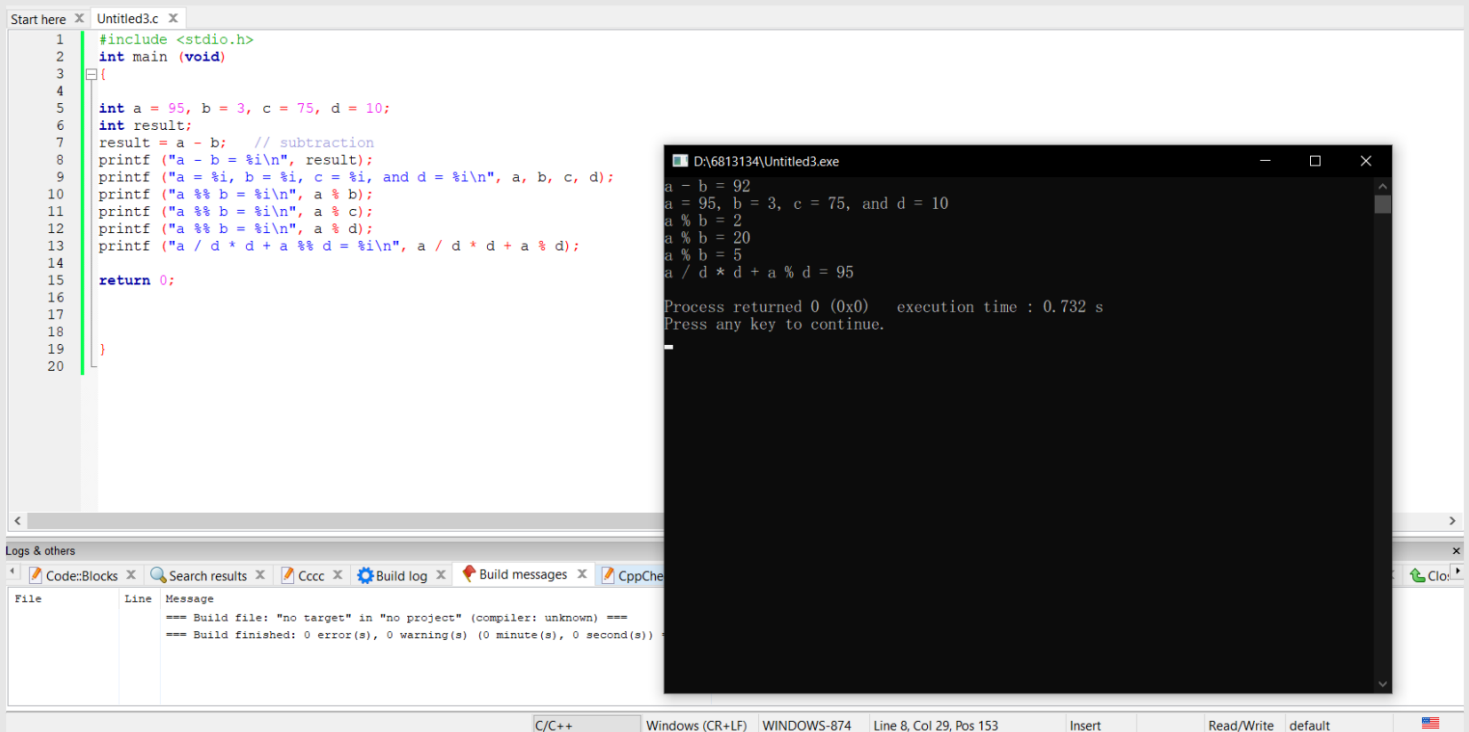
Terminal output (bottom):
```
D:\6813134\Untitled3.exe
a = 95, b = 3, c = 75, and d = 10
a % b = 2
a % b = 20
a % b = 5
a / d * d + a % d = 95

Process returned 0 (0x0)   execution time : 0.636 s
Press any key to continue.
```

Logs & others
Code::Blocks   Search results   Cccc   Build log   Build messages   Cpp

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(

```c
#include <stdio.h>
int main (void)
{

int a = 95, b = 3, c = 75, d = 10;
int result;
result = a - b;    // subtraction
printf ("a - b = %i\n", result);
printf ("a = %i, b = %i, c = %i, and d = %i\n", a, b, c, d);
printf ("a %% b = %i\n", a % b);
printf ("a %% b = %i\n", a % c);
printf ("a %% b = %i\n", a % d);
printf ("a / d * d + a %% d = %i\n", a / d * d + a % d);

return 0;

}
```

```
a - b = 92
a = 95, b = 3, c = 75, and d = 10
a % b = 2
a % b = 20
a % b = 5
a / d * d + a % d = 95

Process returned 0 (0x0)   execution time : 0.732 s
Press any key to continue.
```

=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s))

```c
#include <stdio.h>
int main (void)
{

int a = 20;
int b = 5;

float c = 20.0;
float d = 5.0;

printf ("6 + a / 5 * b = %i\n", 6 + a / 5 * b);
printf ("a / b * b = %i\n", b * b);
printf ("c / d * d = %i\n", d * d);
printf ("-a = %i\n", -a);


return 0;

}
```

```
6 + a / 5 * b = 26
a / b * b = 25
c / d * d = 0
-a = -20

Process returned 0 (0x0)   execution time : 0.630 s
Press any key to continue.
```

=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 sec

```c
#include <stdio.h>
int main (void)
{
float f1=123.125,f2;
int i1,i2=-150;
char c='a';
i1=f1;//float to integer conversion
printf ("%f assigned to an int produces %f\n",f1,i1);
f1=i2;//float to integer conversion
printf ("%f assigned to an int produces %f\n",i2,f1);
f1=i2/100;//integer divided by integer
printf ("%i divided by 100 produces %f\n",i2,f1);
f2=i2/100.0;//integer divided by float
printf ("%i divided by 100 produces %f\n",i2,f2);
f2=(float)i2/100;//type cast operator
printf("(float)%i divided by 100 produces &f\n",i2,f2);

return 0;

}
```

Terminal output (D:\6813134\Untitled3.exe):

```
123.125000 assigned to an int produces 0.000000
0.000000 assigned to an int produces -150.000000
-150 divided by 100 produces -1.000000
-150 divided by 100 produces -1.500000
(float)-150 divided by 100 produces &f

Process returned 0 (0x0)   execution time : 0.575 s
Press any key to continue.
```

Logs & others — Build messages:

```
File        Line   Message
                   === Build file: "no target" in "no project" (compiler: unknown) ===
                   === Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) =
```

2. Which of the following are invalid variable names? Why?

Click here to view code image

✓ Int	✗ char *(เป็นคำสงวน)*	✗ 6_05 *ต้องขึ้นต้นด้วย ตัวอักษรเท่านั้น*
✓ Calloc	✓ Xx	✓ alpha_beta_routine
✓ floating	✓ _1312	✓ z
✓ ReInitialize	✓ _	✗ A$ *ห้ามมีตัวอักษร พิเศษ*

3. Which of the following are invalid constants? Why?

Click here to view code image

123.456	0x10.5 *เลขฐาน 16 ต้องเป็นจำนวนเต็ม*	0X0G1 *G ไม่ใช่เลขฐาน 16*
0001	0xFFFF	123L
0Xab05	0L	-597.25 *→ (-) ไม่ใช่ส่วนหนึ่งของ literal*
123.5e2 *ใช้กับ จำนวนจริง ไม่ได้*	.0001	+12 *→ (+) ไม่ใช่ส่วนหนึ่งของ literal*
98.6F	98.7U *←ใช้กับ*	17777s *→ ไม่มี s ในภาษา C*
0996 *←ไม่มี 9*	-12E-12	07777
1234uL	1.2Fe-7	15,000 *→ ใช้เครื่องหมาย , ไม่ได้*
1.234L	197u	100U
0XABCDEFL	0xabcu	+123

First window

```c
#include <stdio.h>
int main (void)
{
    double x=2.55;
    double result;
    result=(3*x*x*x)-(5*x*x)+6;
    printf("for x=%.2f\n",x);
    printf("the result of 3x^3-5x^2+6 is:%f\n",result);

    return 0;

}
```

Console output:

```
for x=2.55
the result of 3x^3-5x^2+6 is:23.231625

Process returned 0 (0x0)   execution time : 0.028 s
Press any key to continue.
```

Second window

```c
    }
    printf("Answer = %d\n", x);

    // ข้อ 2
    i = 12258;
    j = 23;
    x = i + 1;
    while (x % j != 0 || x % 2 != 0) {
        x++;
    }
    printf("Answer = %d\n", x);

    // ข้อ 3
    i = 996;
    j = 4;
    x = i + 1;
    while (x % j != 0 || x % 2 != 0) {
        x++;
    }
    printf("Answer = %d\n", x);

    return 0;

}
```

Console output:

```
Answer = 378
Answer = 12282
Answer = 1000

Process returned 0 (0x0)   execution time : 0.563 s
Press any key to continue.
```