First assignment of c programing .

Student Name : محمد ابراهيم محمد السعيد ابراهيم

Id : 18011342

Section or lab : 8

Electrical communication engineering.

Code 1:

```c
#include <stdio.h>

#include <stdlib.h>

int main()

{

    float x,y,z ;

    printf("please enter the first number \n");

    scanf("%f",&x);

    printf("please enter the second number \n");

    scanf("%f",&y);

    z=x+y;

    printf("x+y=%f \n",z);

    z=x-y;

    printf("x-y=%f \n",z);

    z=x*y;
```
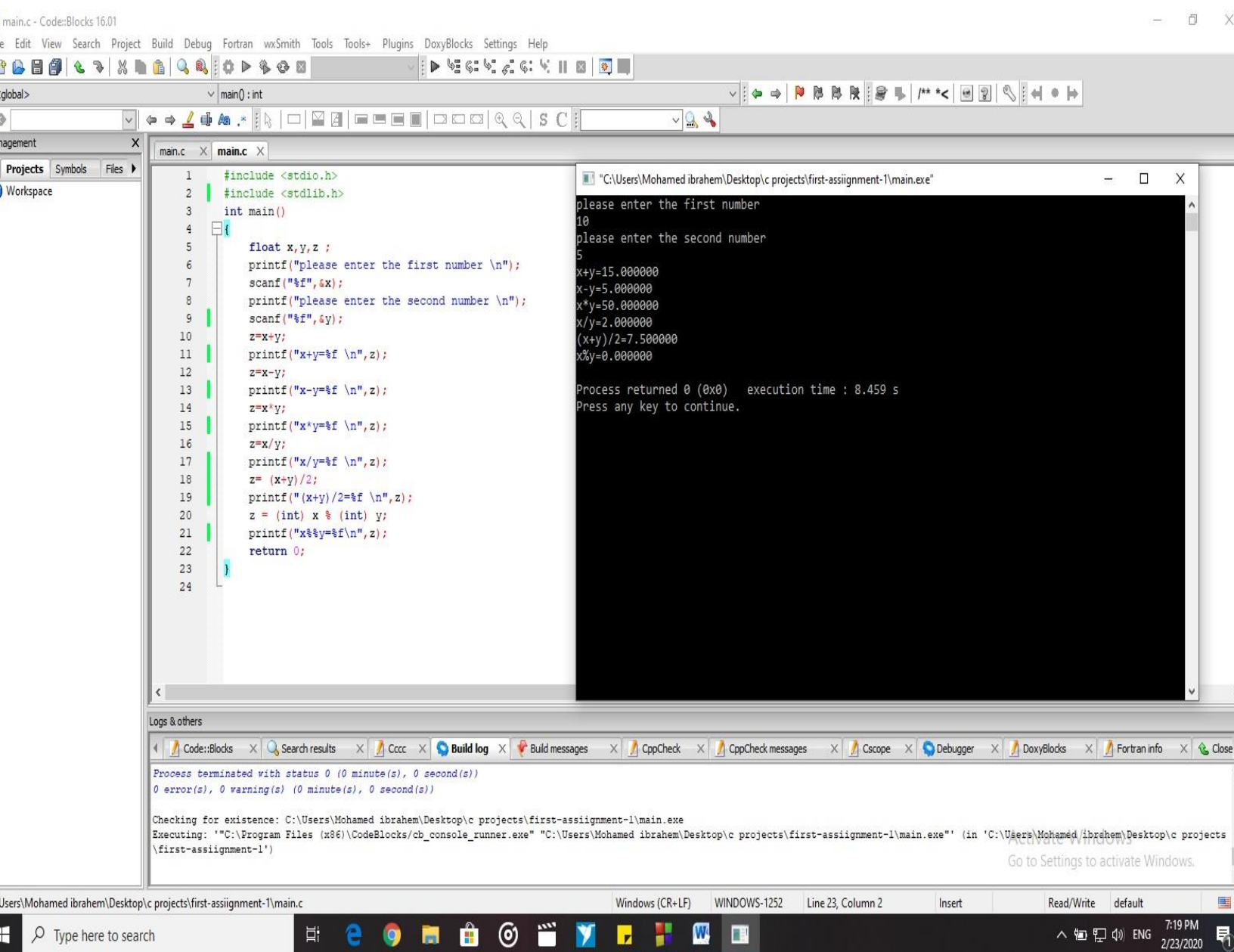
```c
    printf("x*y=%f \n",z);

    z=x/y;

    printf("x/y=%f \n",z);

    z= (x+y)/2;

    printf("(x+y)/2=%f \n",z);

    z = (int) x % (int) y;

    printf("x%%y=%f\n",z);

    return 0;
}
```

Code 2:

```c
#include <stdio.h>

#include <stdlib.h>

int main()

{

    int x,y,z;
```

```c
printf("enter first binary number \n");

scanf("%x",&x);

printf("enter second binary number \n");

scanf("%x",&y);

z=x&y;

printf(" x and y =%x\n",z);

z=x|y;

printf(" x or y = %x\n",z);

z=x^y;

printf(" x xor y = %x\n",z);

z=!x;

printf(" not x= %x\n",z);

z=!y;

printf(" not y = %x\n",z);
//--------------------
int f,h,j;

printf("enter first hexa number number \n");

scanf("%x",&f);

printf("enter second hexa number number \n");

scanf("%x",&h);
```

```c
    f=h&j;
    printf("h and j = %x\n",f);
    f=h|j;
    printf("h or j = %x\n",f);
    f=h^j;
    printf("h xor j = %x\n",f);
    f=!h;
    printf("not h = %x\n",f);
    f=!j;
    printf("not j = %x\n",f);
    return 0;
}
```
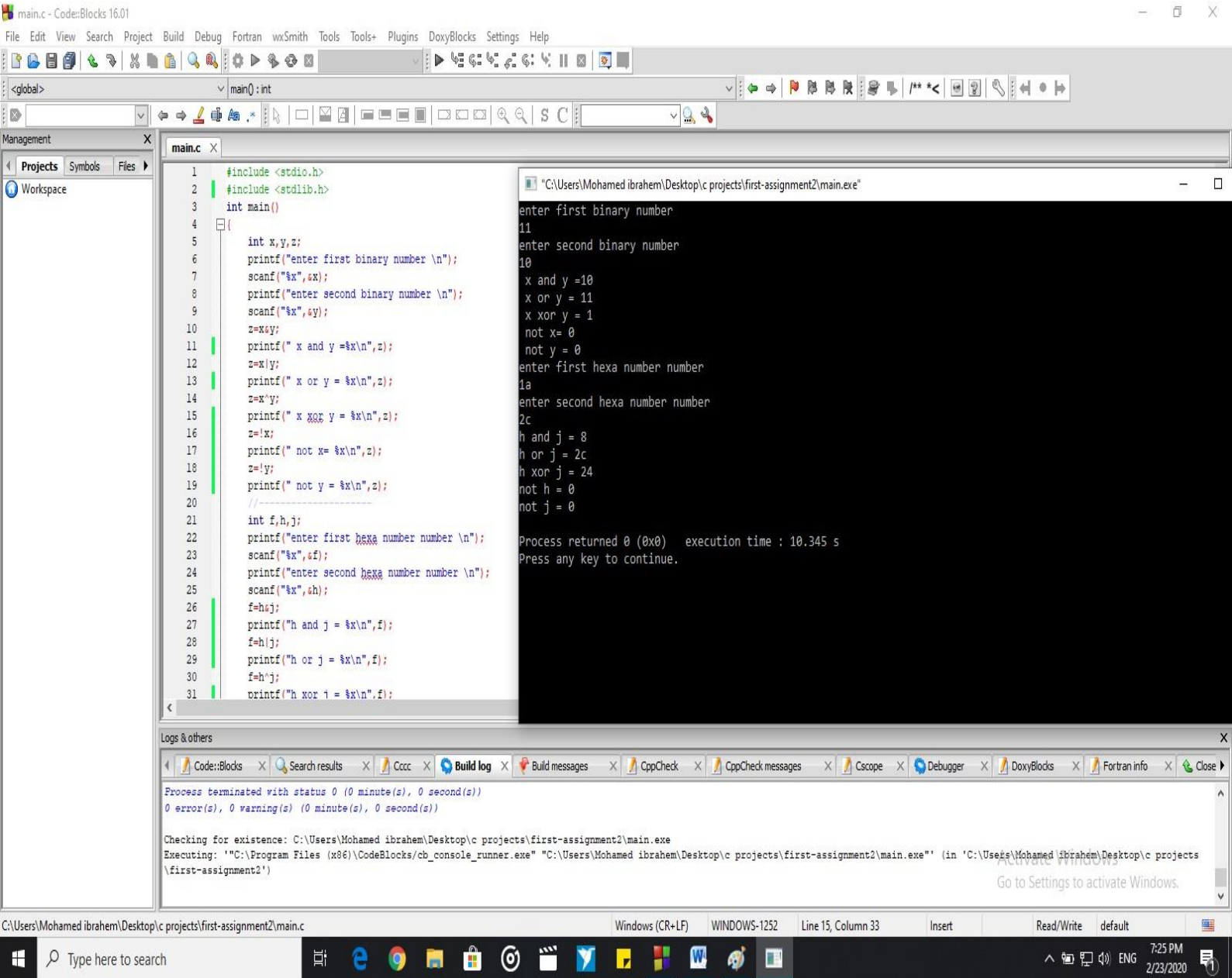
Code 3:-

```c
#include <stdio.h>

#include <stdlib.h>


int main()

{

    //circumstance == المحيط == c
```

```c
float d , l , w , m , area2 , area3 , c2 , c3 ;

float area1 , c1 ;

const float pi =3.14;

// circle area and circumstance .

printf ("first of all we will get the area and the circumstance of the
circle. \n");

printf("so please enter the circle diameter \n");

scanf("%f",&d);

area1= pi*d*(d/4);

printf("circle area =%f \n",area1);

c1= pi * d;

printf("circle circumstance =%f \n",c1);


// Rectangular area and circumstance .

printf("now we will get Rectangular area and circumstance.\n");

printf("so please enter the Rectangular length \n");

scanf("%f",&l);

printf("now please enter the Rectangular width \n");

scanf("%f",&w);

area2=l*w;
```
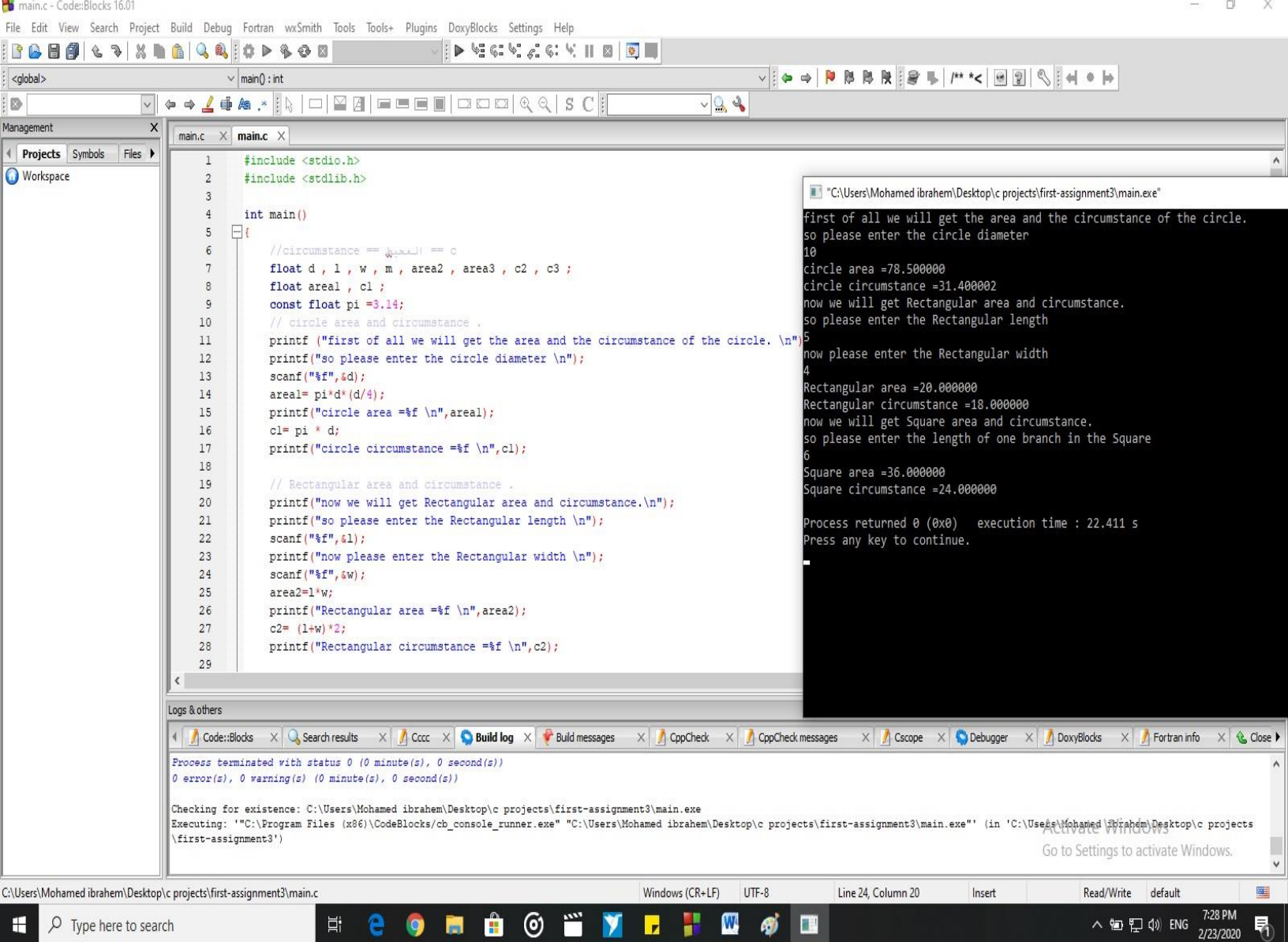
```c
    printf("Rectangular area =%f \n",area2);

    c2= (l+w)*2;

    printf("Rectangular circumstance =%f \n",c2);


    // Square area and circumstance .


    printf("now we will get Square area and circumstance.\n");

    printf("so please enter the length of one branch in the Square \n");

    scanf("%f",&m);

    area3=m*m;

    printf("Square area =%f \n",area3);

    c3= m*4;

    printf("Square circumstance =%f \n",c3);



    return 0;
}
```

Code 4:-

```c
#include <stdio.h>

#include <stdlib.h>


int main()

{
```

```c
    float price , total_price , tax , total_tax;


    const float tips = 0.03 ;

    const float service = 0.04 ;

    printf("please enter the meal price \n");

    scanf("%f",&price);

    printf("please enter the tax \n");

    scanf("%f",&tax);

    total_tax= tax * price *0.01 ;

    printf("total_tax=%f \n",total_tax);

    total_price= total_tax + price + tips*price + service * price ;

    printf("total_price=%f\n",total_price);

    return 0;
}
```

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

int main()
{
    float price , total_price , tax , total_tax;

    const float tips = 0.03 ;
    const float service = 0.04 ;
    printf("please enter the meal price \n");
    scanf("%f",&price);
    printf("please enter the tax \n");
    scanf("%f",&tax);
    total_tax= tax * price *0.01 ;
    printf("total_tax=%f \n",total_tax);
    total_price= total_tax + price + tips*price + service * price ;
    printf("total_price=%f\n",total_price);

    return 0;
}
```

Console output:

```
please enter the meal price
100
please enter the tax
15
total_tax=15.000000
total_price=122.000000

Process returned 0 (0x0)   execution time : 6.048 s
Press any key to continue.
```

Build log:

```
Process terminated with status 0 (0 minute(s), 0 second(s))
0 error(s), 0 warning(s) (0 minute(s), 0 second(s))

Checking for existence: C:\Users\Mohamed ibrahem\Desktop\c projects\first-assignment-3\main.exe
Executing: '"C:\Program Files (x86)\CodeBlocks/cb_console_runner.exe" "C:\Users\Mohamed ibrahem\Desktop\c projects\first-assignment-3\main.exe"' (in 'C:\Users\Mohamed ibrahem\Desktop\c projects
\first-assignment-3')
```