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Week 5 Hand-in

Exercise 1

```c
int rectangle_area(int x1, int x2, int y1, int y2){

    return (x2 - x1) * (y2 - y1);
}
```

As seen in the picture above, the function as made so it returns an integer. And it takes the input of the four integer coordinates x1, x2, y1 and y2.

Exercise 2

```c
#include <stdio.h>


void increment(int *v){

    ++*v; //adds one to the integer v, through pointer *v

    return;
}

int main()
{
    int v = 5;
    increment(&v);
    printf("%d",v);
    return 0;
}
```

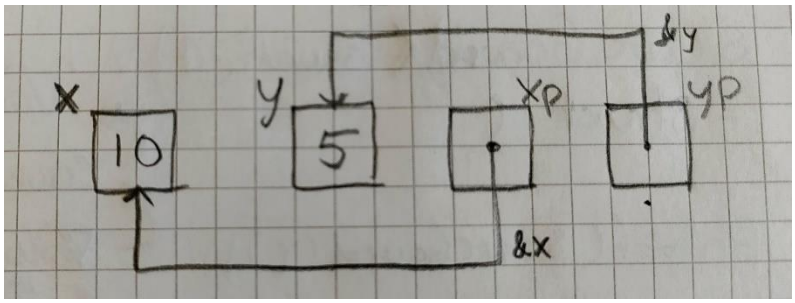
As seen above, the pointer is added 1 through the function void increment. The output of this is 6. The added value happens through the pointer which points to our original value v = 5. And adds one to the integer.

Exercise 3

The final values are

x	y	xp	yp
10	5	10	5

The Diagram:

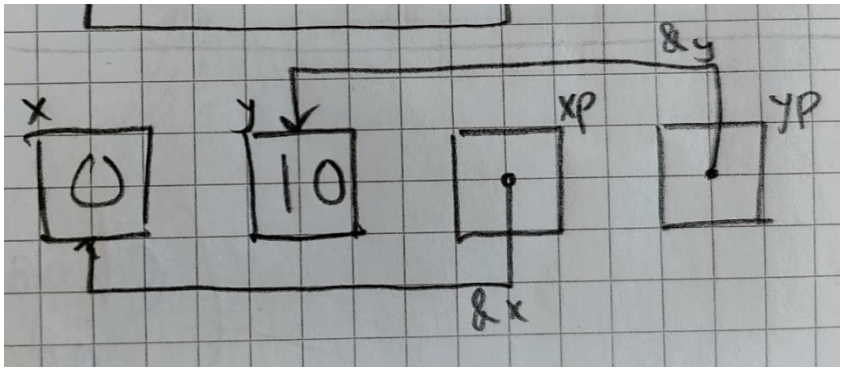


Exercise 4

Final Values are:

x	y	xp	yp
0	10	0	10

The Diagram:

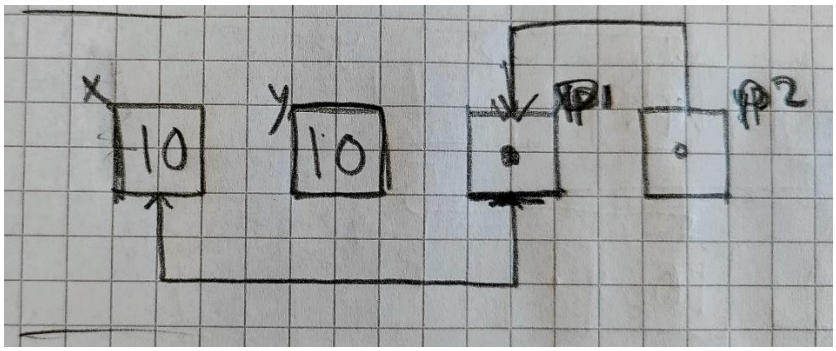


Exercise 5

Final Values are:

x	y	$p1$	$p2$
10	10	10	10

The Diagram:



Exercise 6

Done Visual Studio Code

Exercise 7

Done Visual Studio Code