Hand-in assignment week 5 *Structured data and pointers*

Link til github:

Exercise 1)

(1) (Text answer) (Old exam question) A function `area` calculates and returns the area of a rectangle as an integer. The input rectangle is given as four integer coordinates: `x1`, `x2`, `y1`, `y2`. Complete the function signature below.

```
1
2
3 ________  _________ ( ____________________________________ ) {
4
5   return (x2 - x1) * (y2 - y1);
6 }
```

$$Int\ area\ (int\ x1, int\ x2, int, y1, int\ y2)$$

Exercise 2)

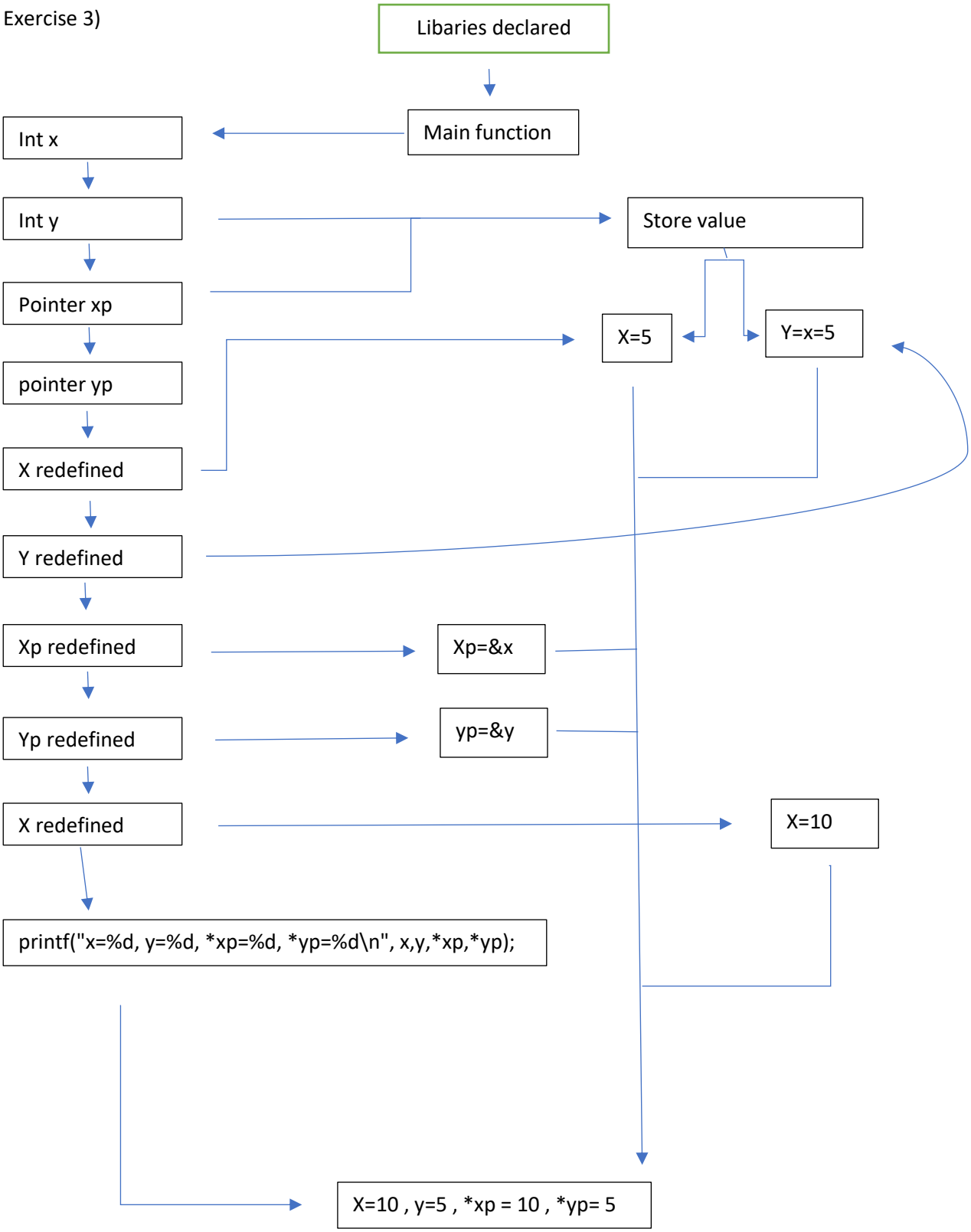
(2) (Text answer) (Old exam question) The function `increment` takes a pointer to an integer and adds `1` to the integer value to which it pints. The function does not return any value. Complete the function signature and function body below, so that the main function prints `6` when executed.

```
1
2
3 __________  ____________________ ( _______________ ) {
4
5
6   ____________________;
7 }
8
9 int main () {
10   int v = 5;
11   increment(&v);
12   printf("%d", v);
13   return 0;
14 }
```

$$void\ increment\ (int * v)\ \{* v = * v + 1;\}$$

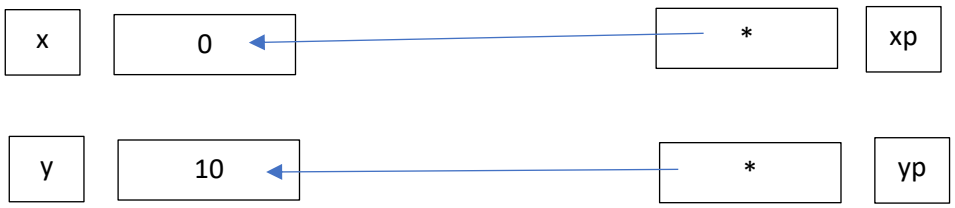
((Fandt ud af at jeg har lavet et flow-chart efter jeg havde lavet det så derfor ser den første således ud))

Exercise 3)



Exercise 4)

Variable		Output (print)
Int x	Print value ->	0
Int y	Print value ->	10
Int *xp	Print value ->	0
Int *yp	Print value ->	10



Exercise 5)

Variable		Output (print)
Int x	Print value ->	10
Int y	Print value ->	10
Int *p1	Print value ->	10
Int *p1	Print value ->	10