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Programming hand-in 5

Link to github: [Aarhus-University-ECE/assignment-5-sima0110: assignment-5-sima0110 created by GitHub Classroom]

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  int  area ( int x1, int x2, int y1, int  y2 ) {
4
5    return (x2 - x1) * (y2 - y1);
6  }
```

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  void  increment ( int *v ) {
4
5
6    *v = *v + 1 ;
7  }
8
9  int main () {
10   int v = 5;
11   increment(&v);
12   printf("%d", v);
13   return 0;
14 }
```

Exercise 3

The values are: $*xp = 10$, $*yp = 5$, $x = 10$ and $y = 5$

A diagram:

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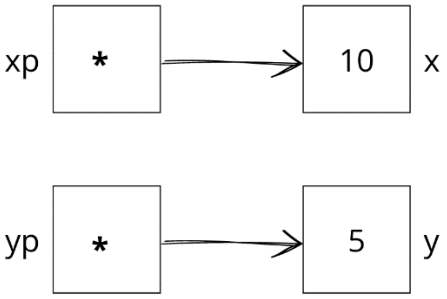
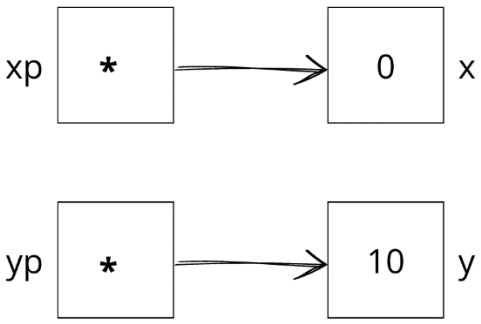


Exercise 4

The values are: $*xp = 0$, $*yp = 10$, $x = 0$ and $y = 10$

A diagram:



Exercise 5

The values are: $*p1 = 10$, $*p2 = 10$, $x = 10$ and $y = 10$

A diagram: