

CMPS 5J – Lab 4

Winter 2018

Due: Sunday February 4 @ 11:59pm

Complete exercise 5-3 from Learning Processing, PDF attached here. Turn in the version using the if-statement, not the version using constrain().

What to turn in

Turn in a file called lab4.pde to Canvas.

Exercise 5-3: Move a rectangle across a window by incrementing a variable. Start the shape at x coordinate 0 and use an if statement to have it stop at coordinate 100. Rewrite the sketch to use constrain() instead of the if statement. Fill in the missing code.



```
// Rectangle starts at location x
float x = 0;

void setup() {
  size(200, 200);
}

void draw() {
  background(255);
  // Display object
  fill(0);
  rect(x, 100, 20, 20);

  // Increment x
  x = x + 1;

  -----
  -----
  -----
}
```

5-4 Logical operators

You have conquered the simple `if` statement:

If my temperature is greater than 98.6, then take me to the doctor.

Sometimes, however, simply performing a task based on one condition is not enough. For example:

*If my temperature is greater than 98.6 **OR** I have a rash on my arm, take me to the doctor.*

*If I am stung by a bee **AND** I am allergic to bees, take me to the doctor.*

The same idea applies in programming.

*If the mouse is on the right side of the screen **AND** the mouse is on the bottom of the screen, draw a rectangle in the bottom right corner.*