EM&CP Blk   Monday, March 28, 2022

nested ifs

$(0,0)$

x_1 x_2

$y \downarrow$

pt!! . setXY $\rightarrow$ $\bar{X}$
setZW $\rightarrow$ $\bar{Y}$

y_1

y_2
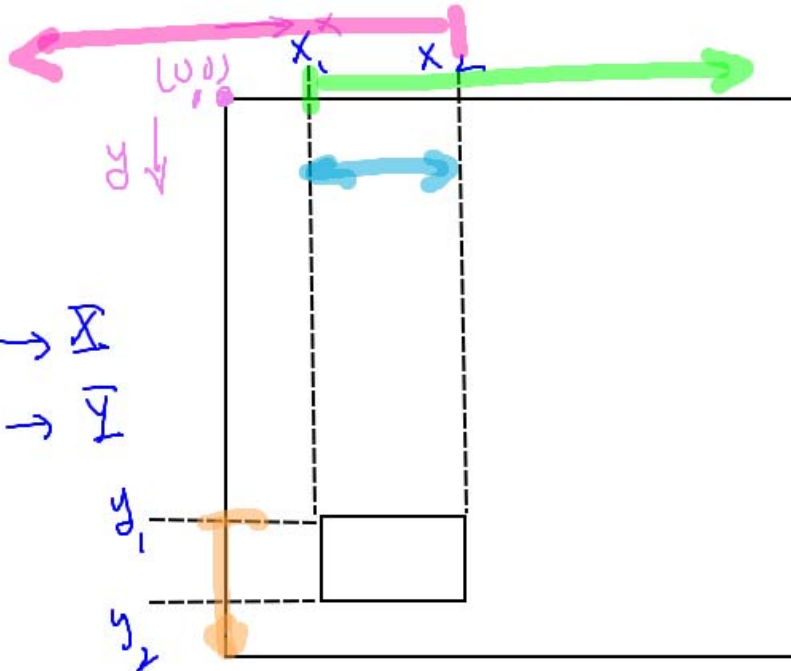
if $(\bar{X} \geq x_1)$:
  if $(\bar{X} \leq x_2)$
    if $(\bar{Y} \geq y_1)$
      if $(\bar{Y} \leq y_2)$ all true

then have
clicked the
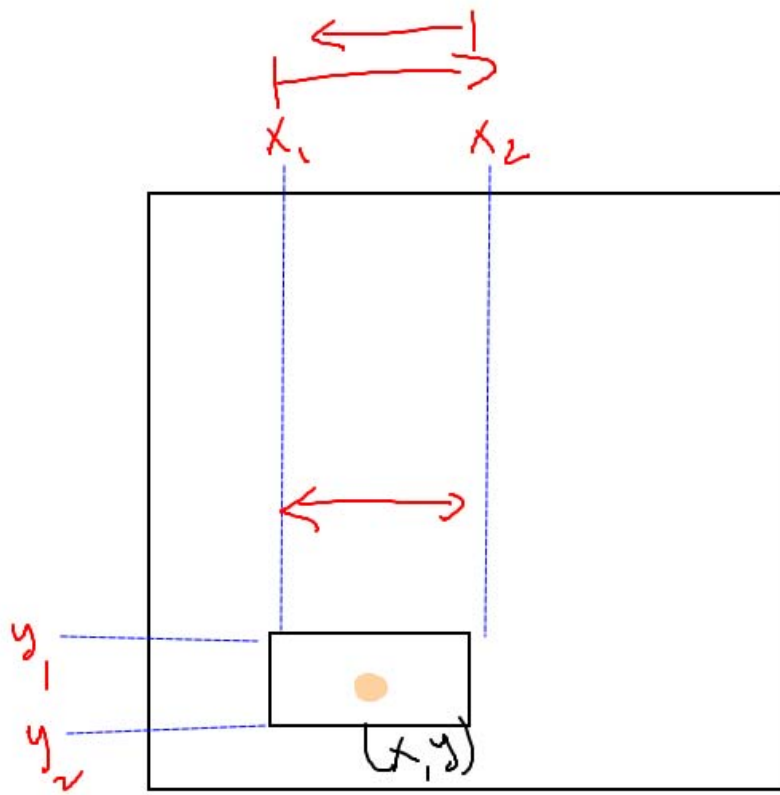button

and

Truth Table for "and" ($\wedge$)

and

AND

p	q	$p \wedge q$
T	T	T
T	F	F
F	T	F
F	F	F

mull and set gas

In python:

and

In Processing:

&&

$$if\ (x \geq x_1\ and\ x \leq x_2):$$
$$if\ (y \geq y_1\ and\ y \leq y_2)$$
$$the\ button\ clicked$$

Binary: 0, 1

off → 0

1 ← on

FALSE

TRUE

In Python

Any non-zero number will be taken as True

0 (zero) will always be false

Truth Table for
negation (not, ~)

P	NOT ~p
T	F
F	T

¬¬P ── negation of p

Python: negation ──→ 'not'

Chapter 3