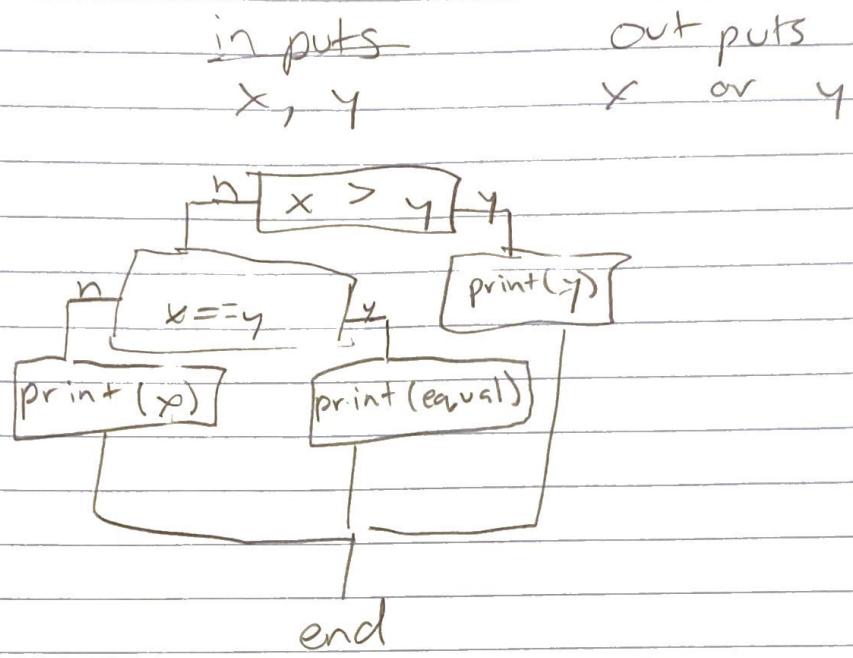
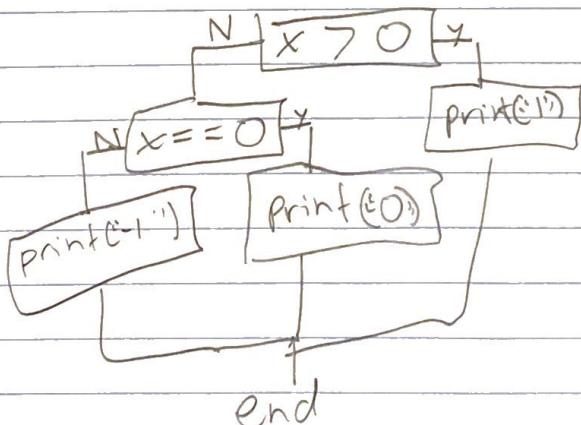


Given two num print  
smaller value



Sign Function

input                    output  
x                            -1, 0, 1



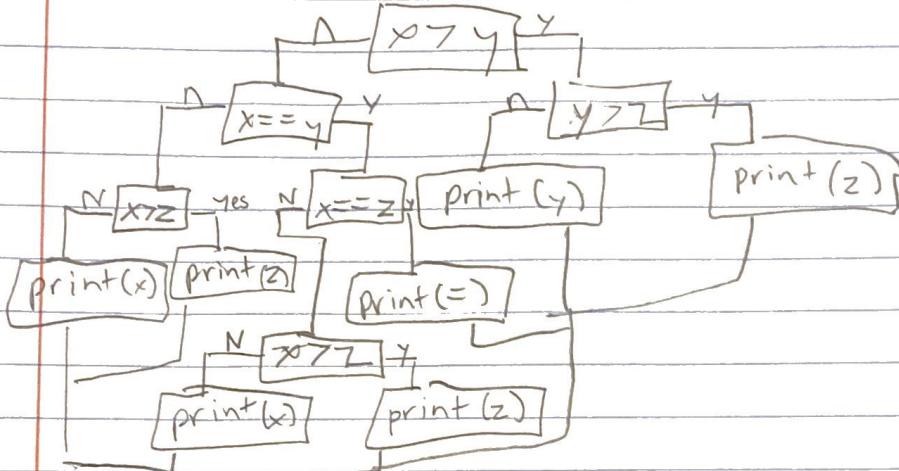
Given 3 numbers find  
smallest + value

input

$x, y, z$

output

$x, y, z$ , or -



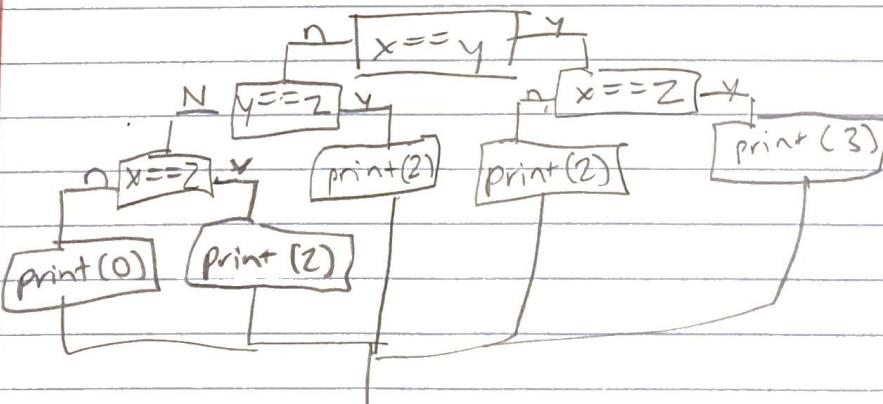
end Equal Numbers

input

$x, y, z$

output

0, 2, 3

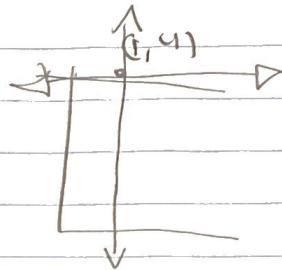


end

## Rook move

rules

- 1)  $y_1 == y_2$
- 2)  $x_1 == x_2$

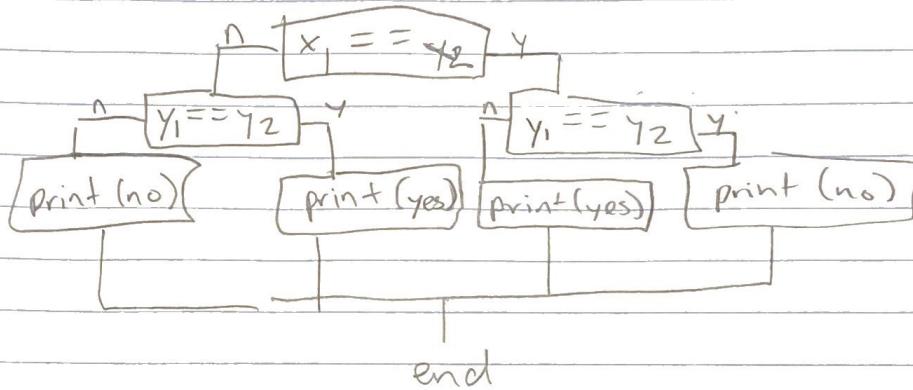


inputs

$y_1, x_1, x_2, y_2$

outputs

yes, no



## Chess board same color

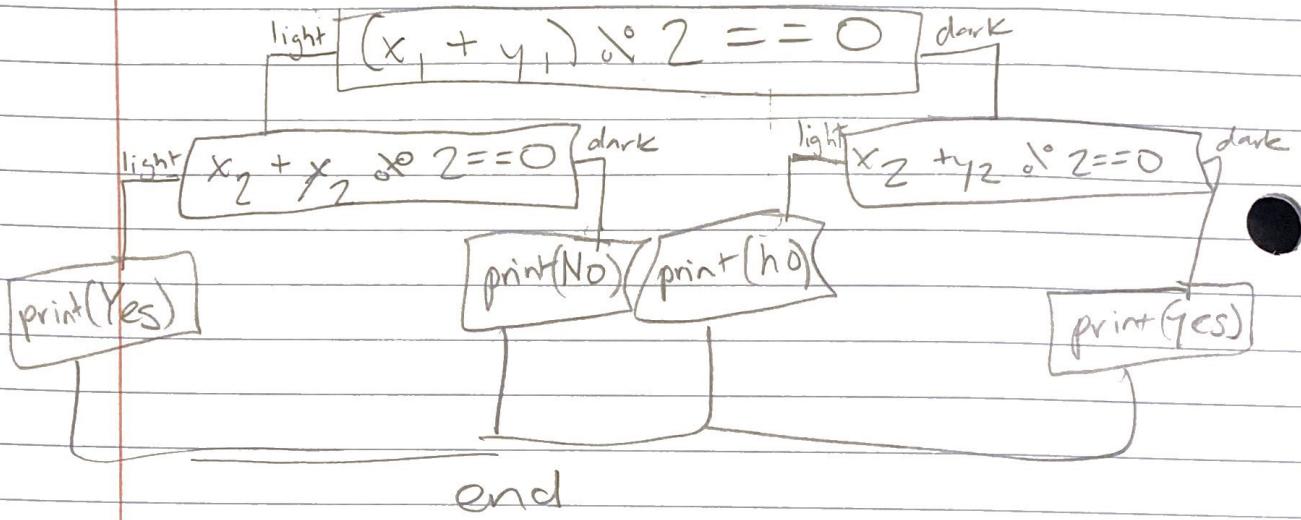
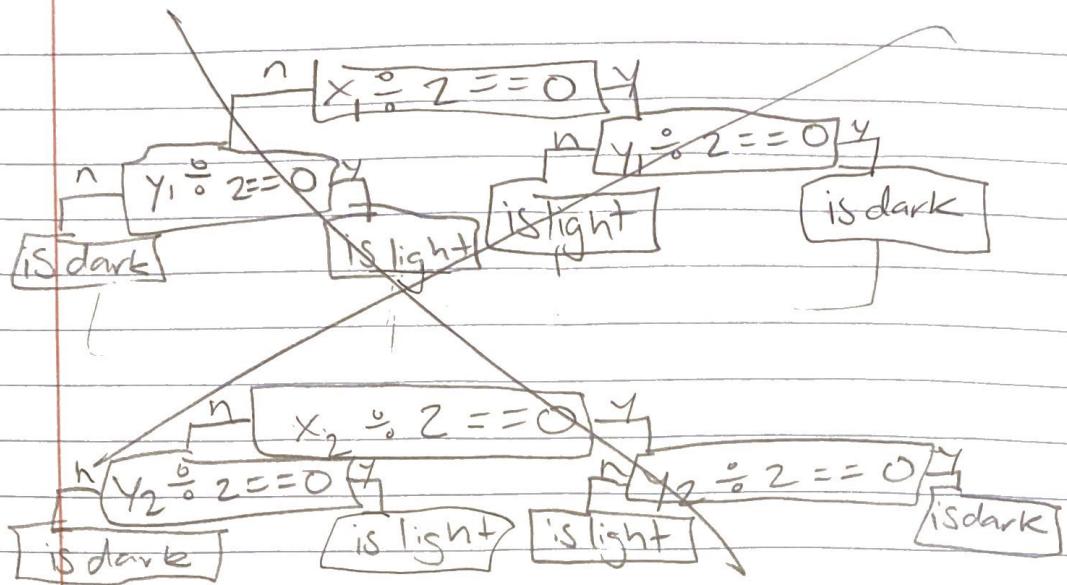
Rules

- 1) row odd  
dark 1, 3, 5, 7
- 2) row even  
dark 2, 4, 6, 8

Inputs

$x_1, y_1$

$x_2, y_2$



# King Move

## Rules

$$1) |x_1 - x_2| = 1$$

$$2) |y_1 - y_2| = 1$$

$$|y_1 - y_2| = 0$$

$$|x_1 - x_2| = 0$$



input

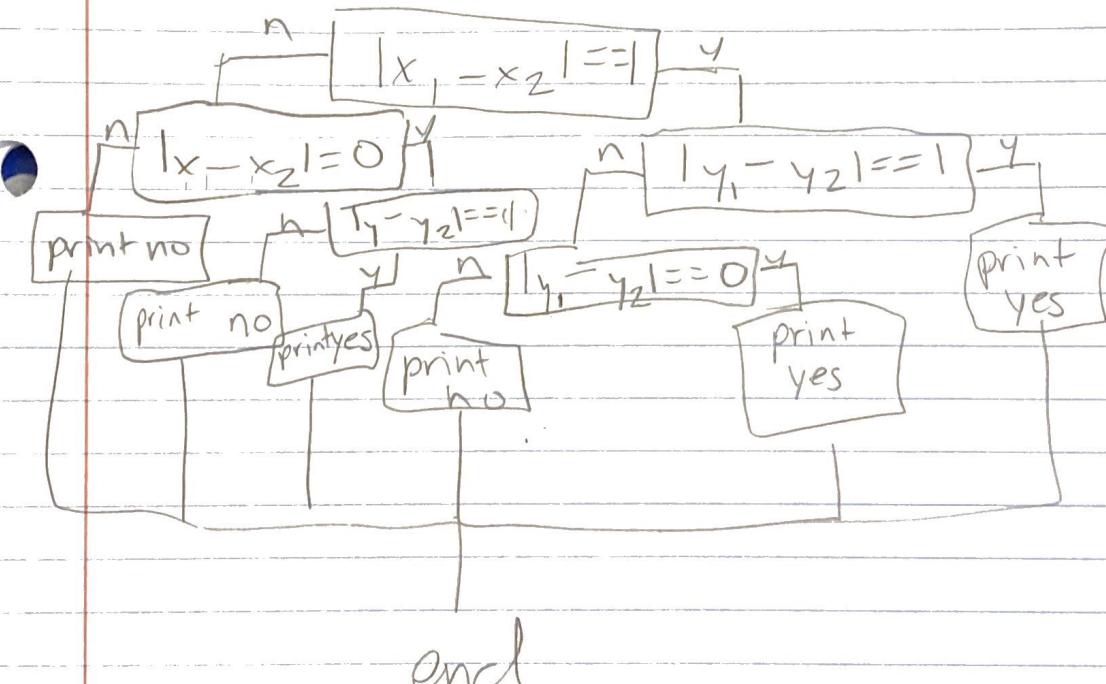
$y_1$

$x_1$

output

yes,

no



# Queen

Rules

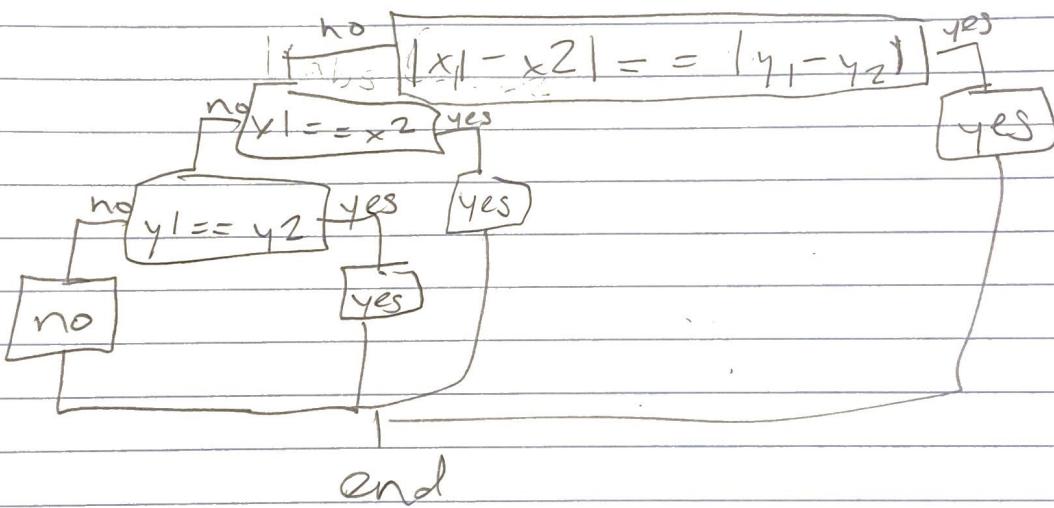
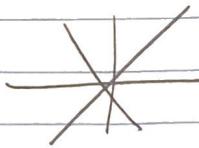
$$y_1 == y_2$$

$$x_1 == x_2$$

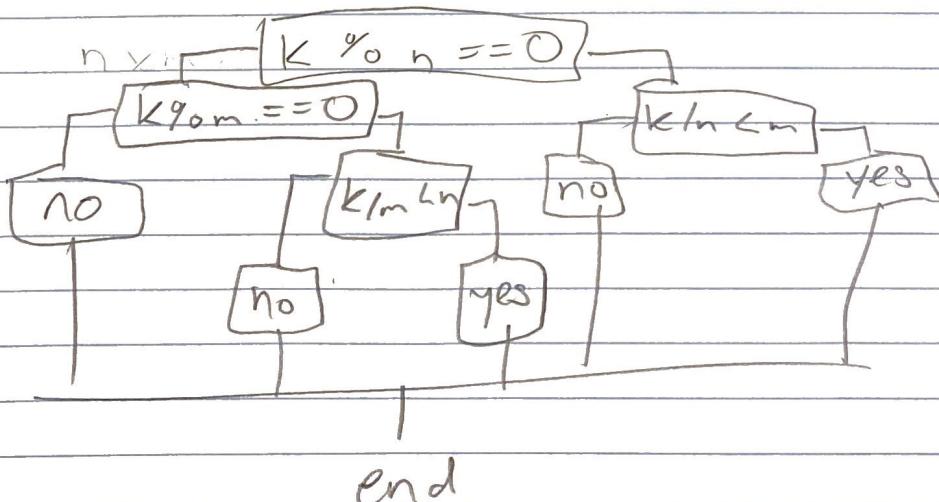
$$|x_1 - x_2| = 1$$

$$|y_1 - y_2| = 1$$

$$|y_1 -$$



# Choco Bar

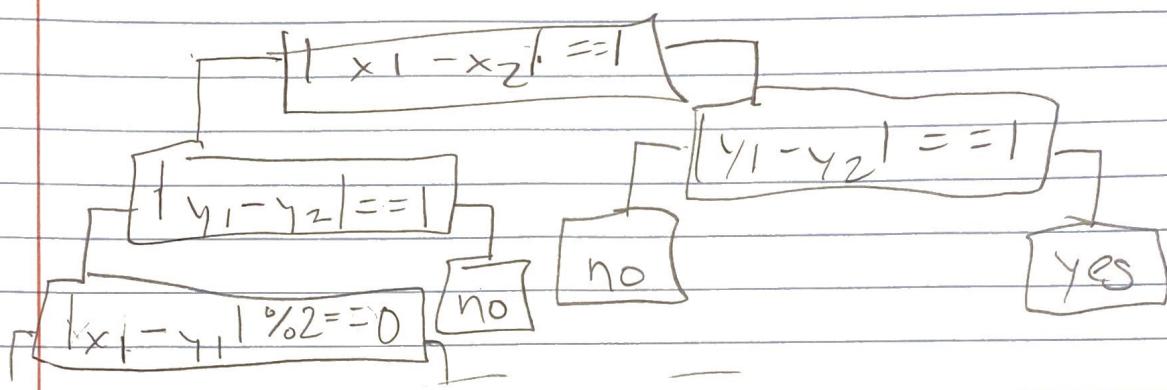
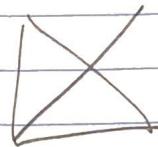


# Bishop

inputs

$x_1 \ x_2$

$y_1 \ y_2$



$|x_1 - x_2| == 1$

$|y_1 - y_2| == 1$

$|x_1 - y_1| \% 2 == 0$

no

yes

# Leap Year

## Rules

Leap       $\frac{\text{div}}{4}$  but not 100  
               $\frac{\text{div}}{400}$  if by 400

inp                  output  
X                  LEAP  
Common

