Emulator Group HW 10 - Joe Leveille

## Part 1: Pins

Inputs	Outputs	Control Input
address[05]	state[0?]	opCode[01]   dispCode[01]  clk

dispCode is an idea that I've got that decides what, if any, info will be shown to the user (ex: PC or acc & carry or ramChange or status)

status is meant to be a string showing all the listed outputs (acc, state, PC, carry, currAdd)

Part 2: General Scenarios of I/O

Scenario -

Given: opCode = [0,1], address = [0,0,0,1,0,0], clk 0->1, dispCode = [0,0]

## Output:

- This would trigger the value at the address 0x04 to be added to the accumulator
- Both acc and carry would be updated and if dispCode is used, this [0,0,0] code could be used to give the full status of each output

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Scenario -

Given: opCode = [1,1], address = [1,0,0,0,0,1], clk 0->1, dispCode = [0, 1]

## Output:

- This would trigger a jump command to location 33 if carry is currently 0.
- It would then set carry to 0 if it was not before.
- This dispCode could be use to display the resulting PC