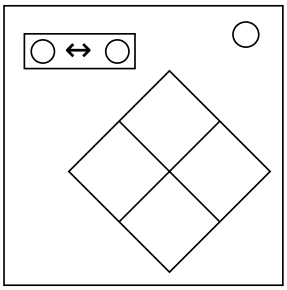
On the Subject of Simon's Statement



Simon is growing up and learned about logic.

A display with two colors and a logical expression will be displayed, as well as a Simon Says element with four buttons.

Step 1: Determine Stage Number

Start with 0.
For every serial number character present in a lit indicator, add 2.
For every duplicate port type, subtract 4.
Add the number of batteries, multiplied by the number of ports.
Multiply by the stage number.
Keep adding or subtracting 25 until in range 0-49.
(If the number is less than 10 prepend a 0. Example: 1 -> 01)

Step 2: Determine Color

The Simon Says element will flash two colors per stage. If a color flashes see it as true; If it doesn't it equates to false.
If the statement on the display is true, use Table A.
Otherwise if the statement is false, use Table B.
Press the colors from all previous stages as well as the new color from the table.
(Example: For True 32 you would press Red.)

Table A

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9
0-										
1-										
2-										
3-										
4-										

Table B

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9
0-										
1-										
2-										
3-										
4-										

Table Ops: Operator explanations

Logical Connective	Symbol	Logic Gate Equivalent	Meaning
Conjunction	$\wedge$	AND	Returns true if all inputs are true. Else returns false.
Disjunction	$\vee$	OR	Returns true if any input is true. Else returns false.
Exclusive Disjunction	$\underline{\vee}$	XOR	Returns true if exactly one input is true. Else returns false.
Alternative Denial	$\mid$	NAND	Returns false if all inputs are true. Else returns true.
Joint Denial	$\downarrow$	NOR	Returns false if any input is true. Else returns true.
Biconditional	$\leftrightarrow$	XNOR	Returns false if exactly one input is true. Else returns true.
Implication (Left)	$\rightarrow$	IMP/IMPLY	Returns false when left input is true and right input is false. Else returns true.
Implication (Right)	$\leftarrow$	IMPBY/IMPLYBY	Returns false when left input is false and right input is true. Else returns true.