



Labwork – 9

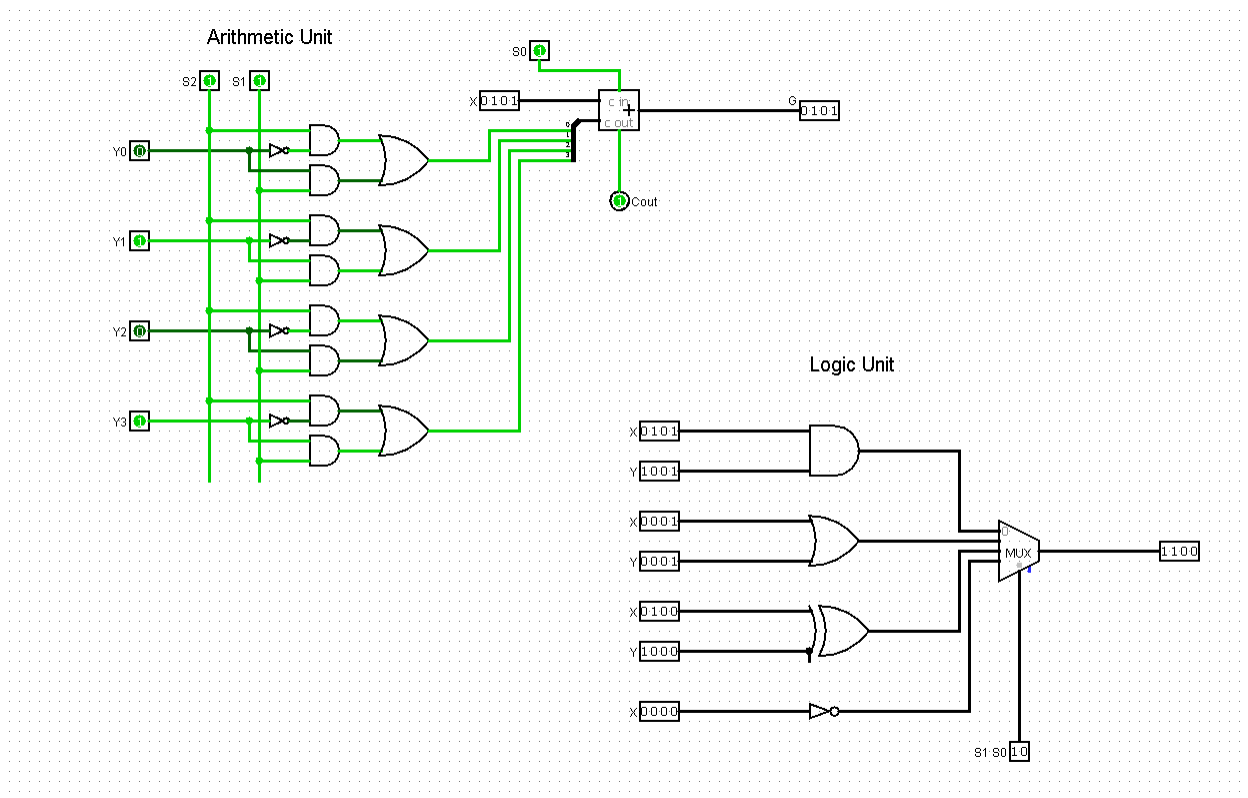
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1. Introduction

Today I learn how to draw Arithmetic and Logic unit in logisim.

2. Experiments



3. Results

S2	S1	S0	Operation
0	0	0	$G=X$
0	0	1	$G=X+1$
0	1	0	$G=X+Y$
0	1	1	$G=X+Y+1$
1	0	0	$G=X+Y'$
1	0	1	$G=X+Y'+1$
1	1	0	$G=X-1$
1	1	1	$G=X$

S1	S0	X	Y	G
0	0	1010	0011	0010
0	1	1010	0000	1010
1	0	0101	0110	0011
1	1	0000	-	1111

4. Discussion

We can Generate an Arithmetic Unit and Logic Unit and we know the truth table for both units.