



Labwork – 6

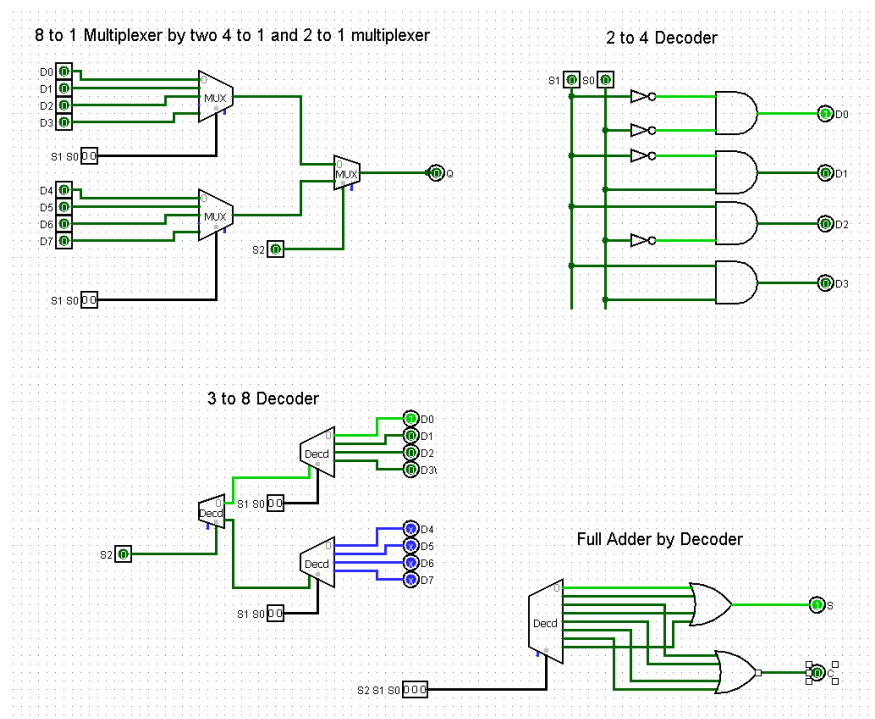
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1. Introduction

Today I learn how to draw 3 different circuits and 8-to-1 Multiplexer and 2-to-4 Decoder and 3-to-8 Decoder and Full Adder by Decoder we saw the output the same in the truth table.

2. Experiments



3. Results

8-to-1 Multiplexer truth table

S0	S1	S2	F
0	0	0	D0
0	0	1	D1
0	1	0	D2
0	1	1	D3
1	0	0	D4
1	0	1	D5
1	1	0	D6
1	1	1	D7

Full Adder using 3-to-8 Decoder truth table

X	Y	Z	S	C
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

4. Discussion

We can generate full adder by using 3-to-8 Decoder