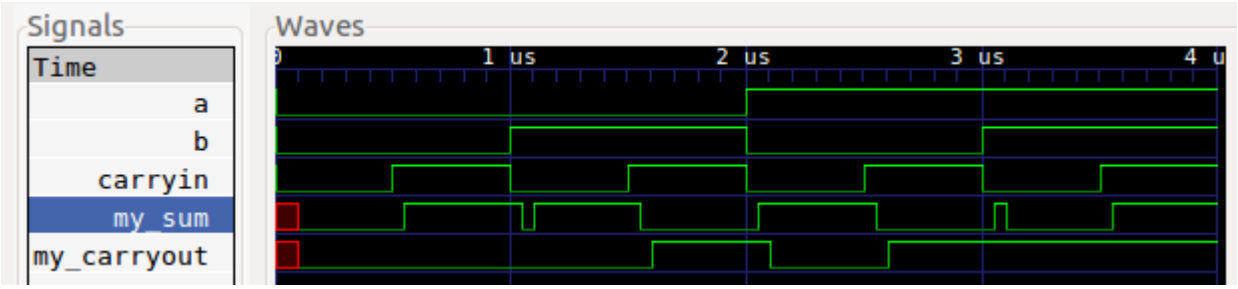
Adder

Truth table:

A	B	Cin	Cout	Sum	BenCout	BenSum	MyCout	MySum
0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	1	0	1
0	1	0	0	1	0	1	0	1
0	1	1	1	0	1	0	1	0
1	0	0	0	1	0	1	0	1
1	0	1	1	0	1	0	1	0
1	1	0	1	0	1	0	1	0
1	1	1	1	1	1	1	1	1

For this test, I assumed the output from Ben's provided module worked correctly and didn't include a third "Expected output" column.

Waveforms:

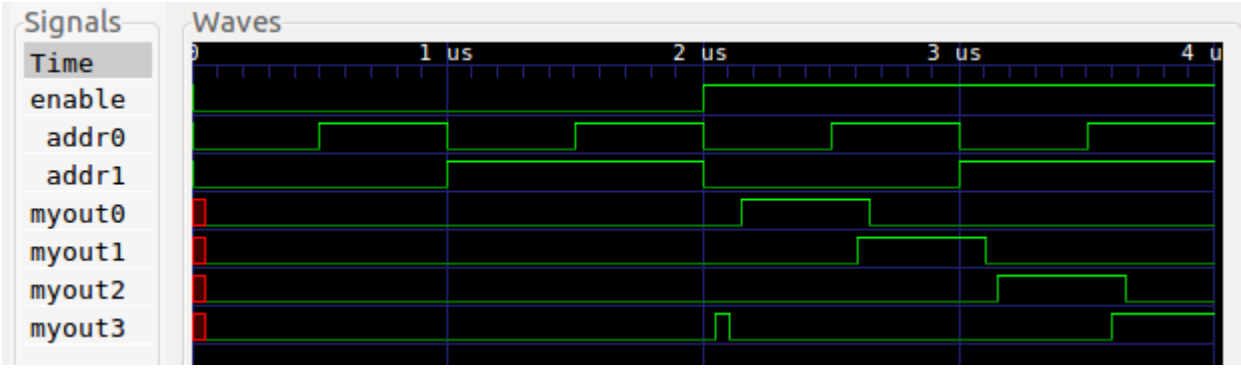


Decoder

Truth table:

Inputs			Ben Outputs				My Outputs				
En	A0	A1	O0	O1	O2	O3	O0	O1	O2	O3	Expected Output
0	0	0	0	0	0	0	0	0	0	0	All false
0	1	0	0	0	0	0	0	0	0	0	All false
0	0	1	0	0	0	0	0	0	0	0	All false
0	1	1	0	0	0	0	0	0	0	0	All false
1	0	0	1	0	0	0	1	0	0	0	O0 Only
1	1	0	0	1	0	0	0	1	0	0	O1 Only
1	0	1	0	0	1	0	0	0	1	0	O2 Only
1	1	1	0	0	0	1	0	0	0	1	O3 Only

Waveforms:



Multiplexer

Truth table:

A0	A1	in0	in1	in2	in3	BenOut	MyOut	Expected
0	0	0	0	0	0	0	0	in0
0	0	1	0	0	0	1	1	in0
1	0	0	0	0	0	0	0	in1
1	0	0	1	0	0	1	1	in1
0	1	0	0	0	0	0	0	in2
0	1	0	0	1	0	1	1	in2
1	1	0	0	0	0	0	0	in3
1	1	0	0	0	1	1	1	in3

Waveforms: