Assignment B-6 Exercise 3.3 F(A,B,C) = Σ(1,3,5,6)

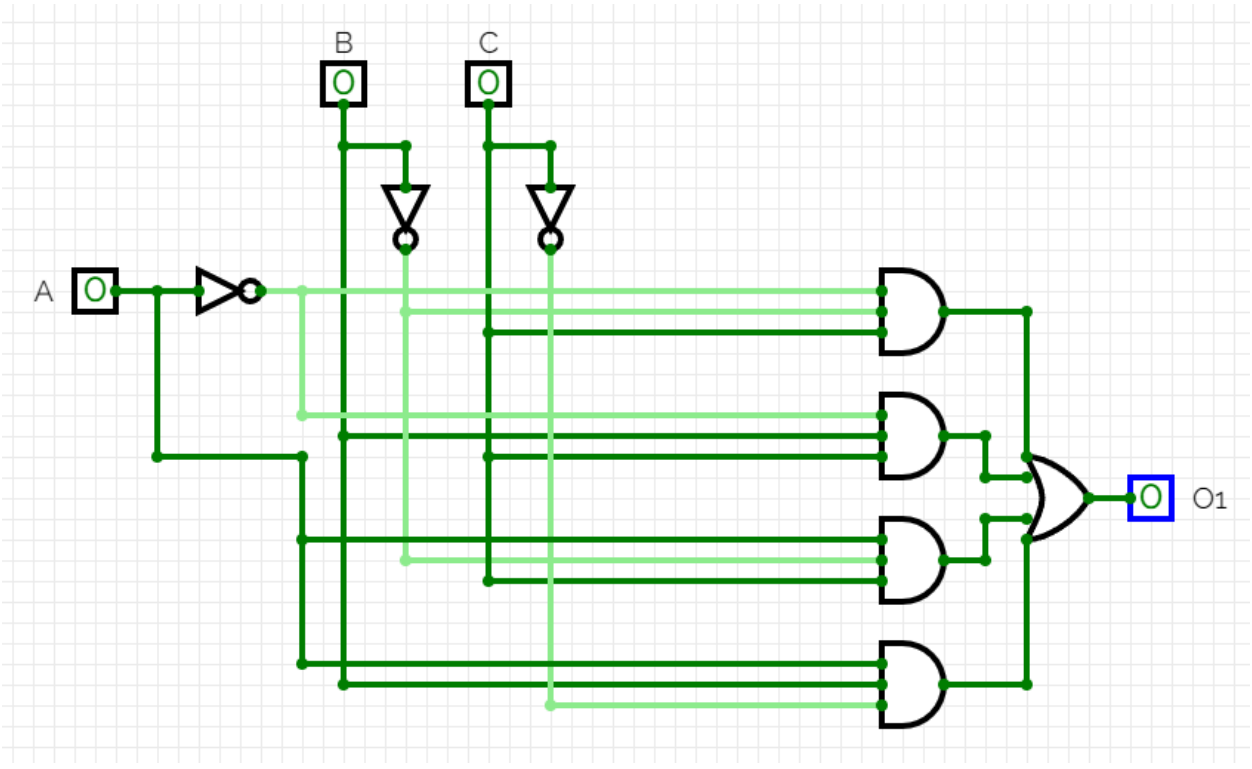
- Exercise 3-3:
- Implementing the Boolean function with MUX
  - F(A, B, C) = ∑(1,3,5,6)
  - The function is the same as previous example
    - Take the B and C as the selection input
    - Take the A as the input of 4x1 MUX
  - Draw the MUX circuit
    - for this Boolean function

A \ BC	00	01	10	11
0				
1				
F				

Truth Table

A	B	C	F
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	0

1) Design Screenshot



Don't know if I'm allowed to turn A from 4 inputs to just 1. But I did it cause it seems more efficient/cleaner.

2) Testbench

Title: Test1

Sequential Test | Combinational Test

	INPUTS			OUTPUTS
Label	A	B	C	O1
Bitwidth	1	1	1	1

Group 1

Click + to add tests to the group

0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	0

+ New Group | Import from CSV | Export as CSV | Attach

3) Test Result

TESTBENCH

Test: Test1 Type: Combinational

Edit Remove

Group: Group 1 Case: 1

LABELS	A	B	C	O1
Bitwidth	1	1	1	1
Current Case	0	0	0	0
Result				

Validate Run All 8 out of 8 Tests Passed View Detailed