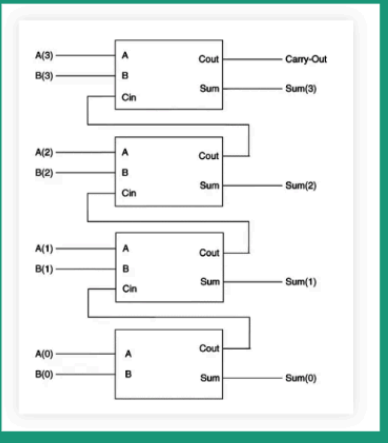
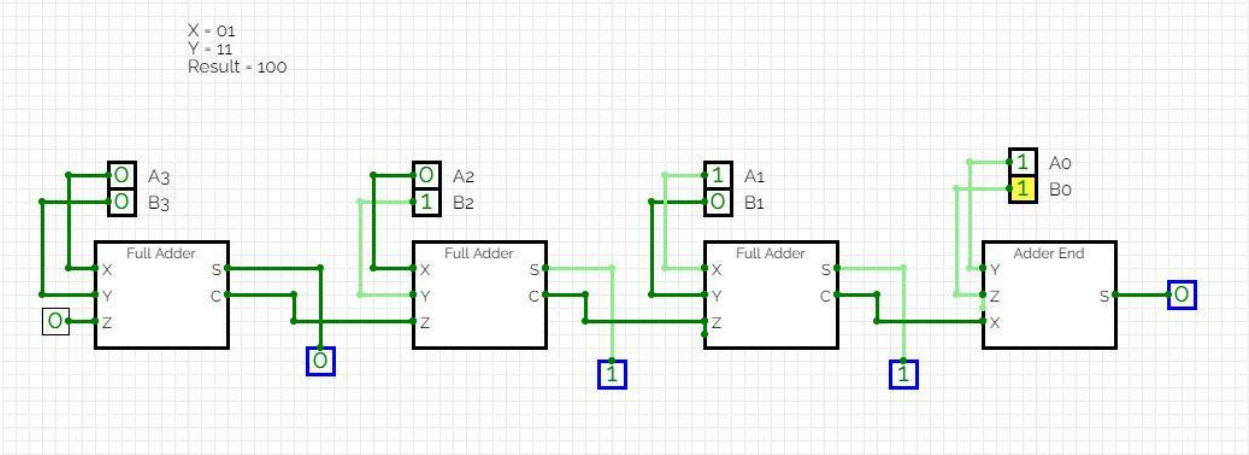
Assignment B-7 Exercise 3.4 Full Adder

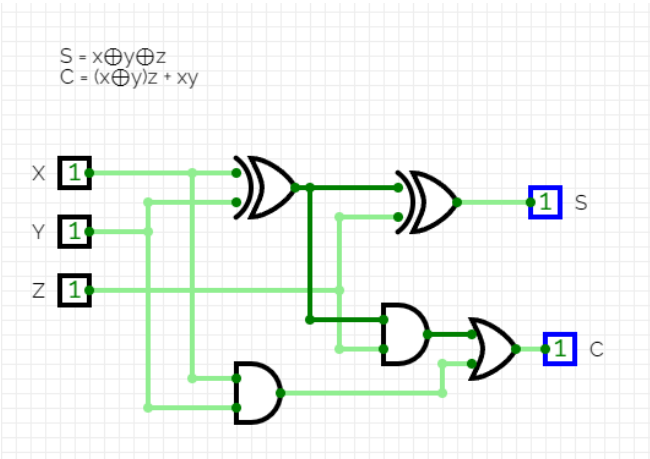
3.3.3 Exercise 3-4 : Draw the circuit of Full adder

- Exercise 3-4:
  1) Draw the circuit for 1-bit full adder
  2) Draw the 4-bits full adder with the entire logic gates
  3) Draw the circuit for 4-bits full adder using the sub-circuit that was made in step (1)
  4) Test your circuits with the arithmetic addition of two numbers
     1) 0111 + 0101 (Overflow?)
        - show this result by using "testbench"
     2) 0011 + 1011 (What is the result as the 2's complement representation)
        - Show your result
        - Elaborate the result with the decimal and binary value



1) Design Screenshot





2) Testbench

Label	X	Y	Z	C	S
Bitwidth	1	1	1	1	1

Group 1

Click + to add tests to the group

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

3) Test Result