

HW1 part1

1.

blif file name: 4bitadder.blif

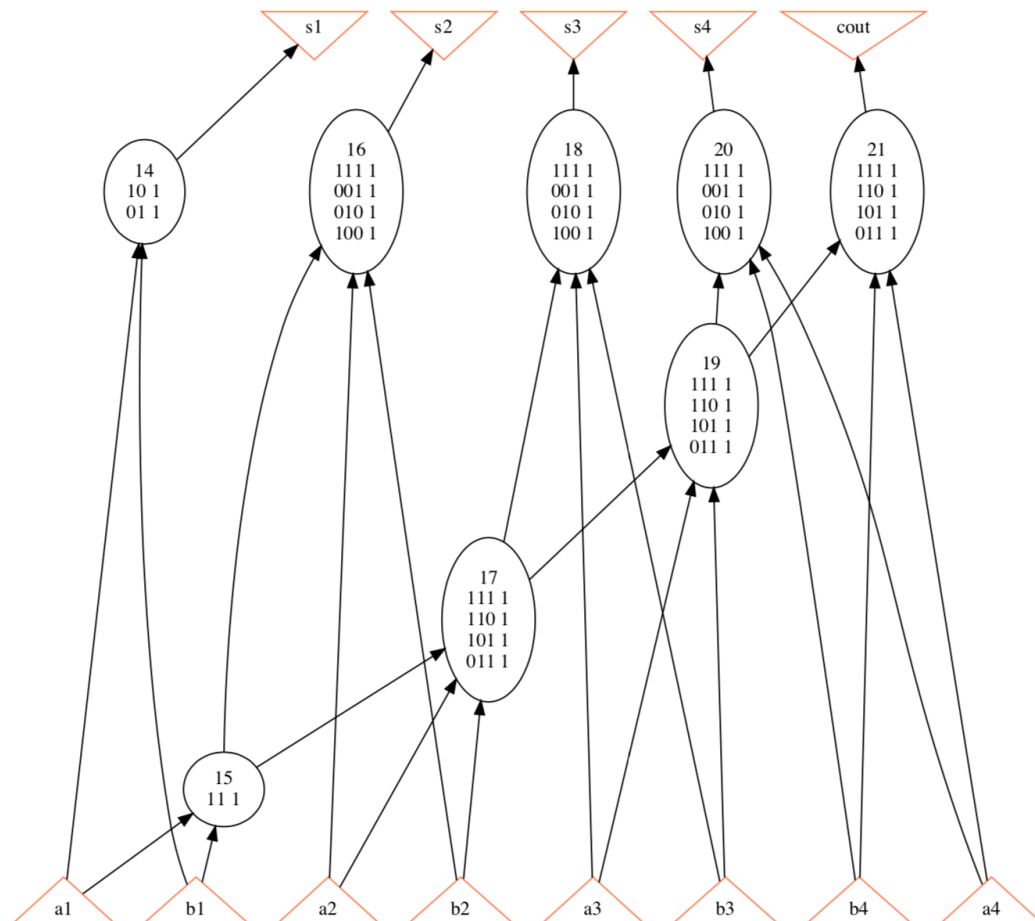
structure is $(a_4, a_3, a_2, a_1) + (b_4, b_3, b_2, b_1) = (cout, s_4, s_3, s_2, s_1)$

2. (The original pictures are in show_picture/final_upload)

show the initial network structure:

Network structure visualized by ABC
Benchmark "4bit_adder". Time was Wed Oct 14 23:20:52 2020.

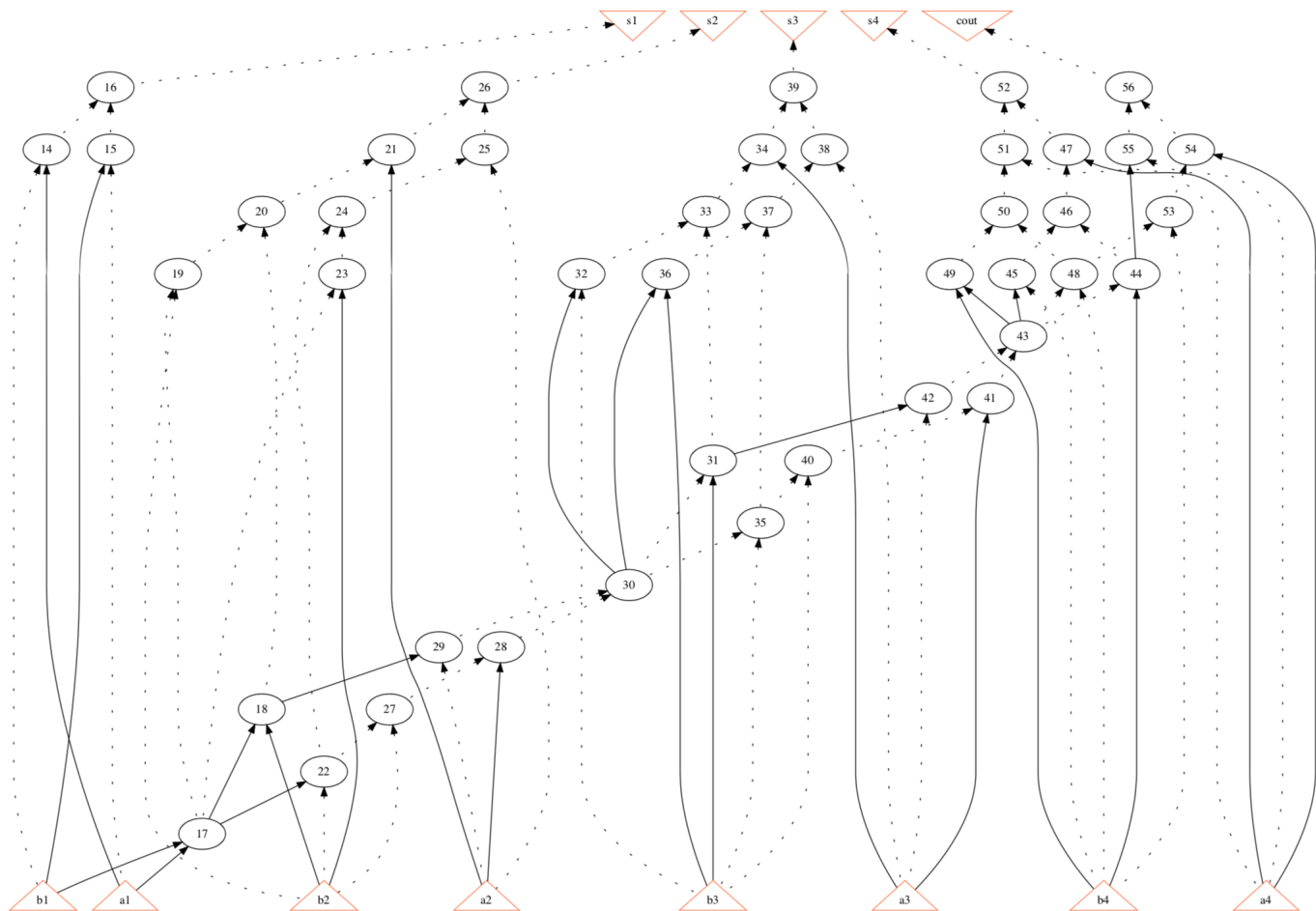
The network contains 8 logic nodes and 0 latches.



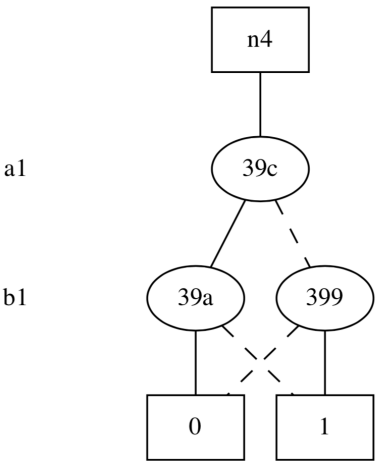
after strash:

Network structure visualized by ABC
Benchmark "4bit_adder". Time was Wed Oct 14 23:21:43 2020.

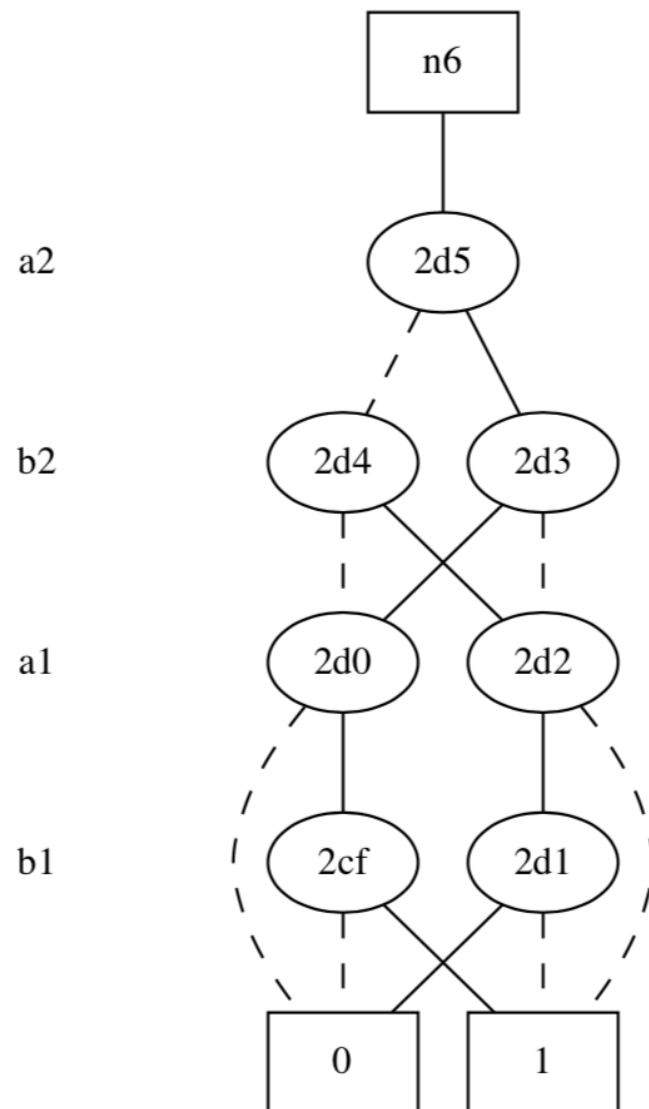
The network contains 43 logic nodes and 0 latches.



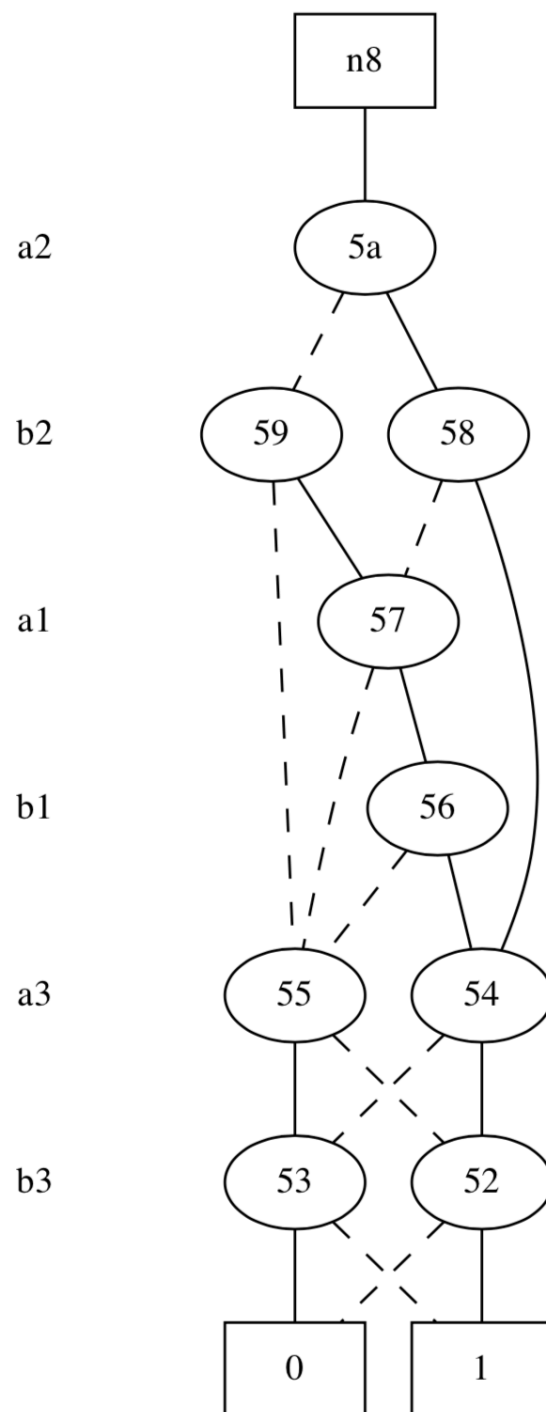
show_bdd of s1:



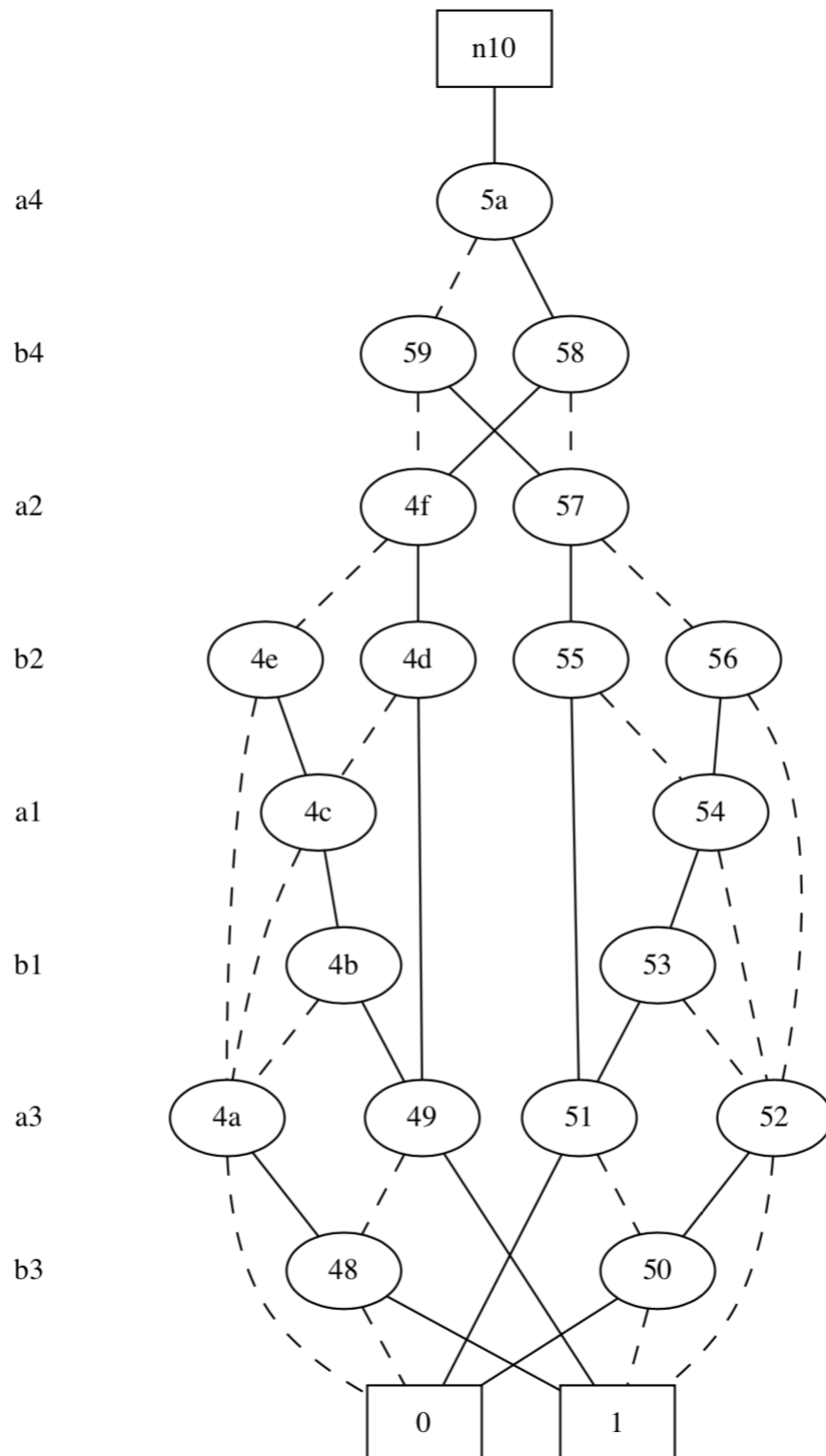
show_bdd of s2:



show_bdd of s3:



show_bdd of s4:



show_bdd of cout:

