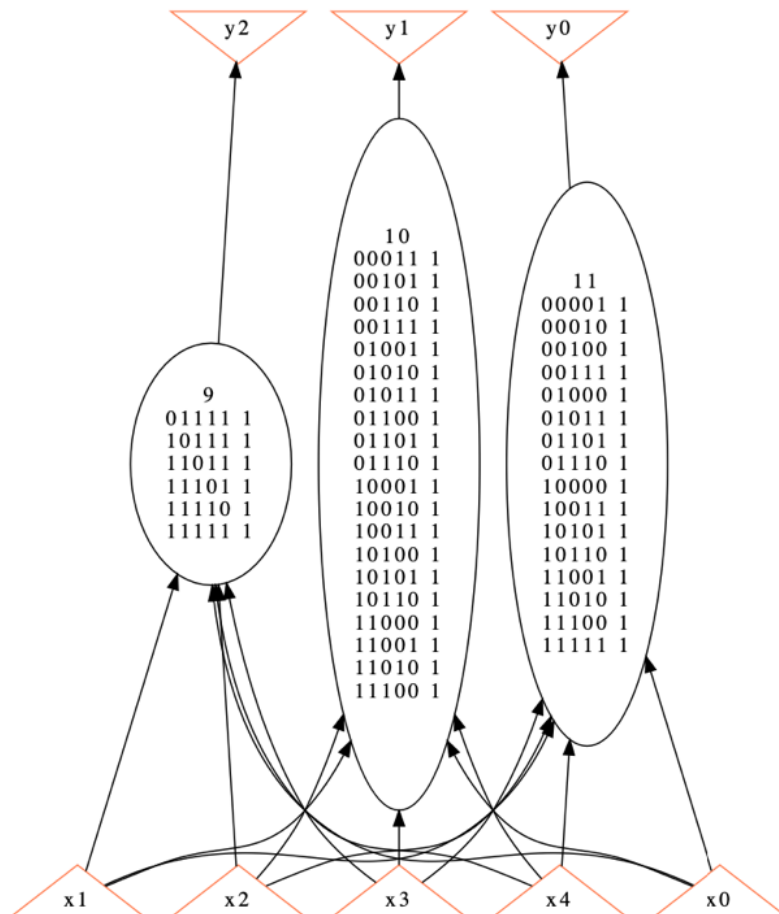


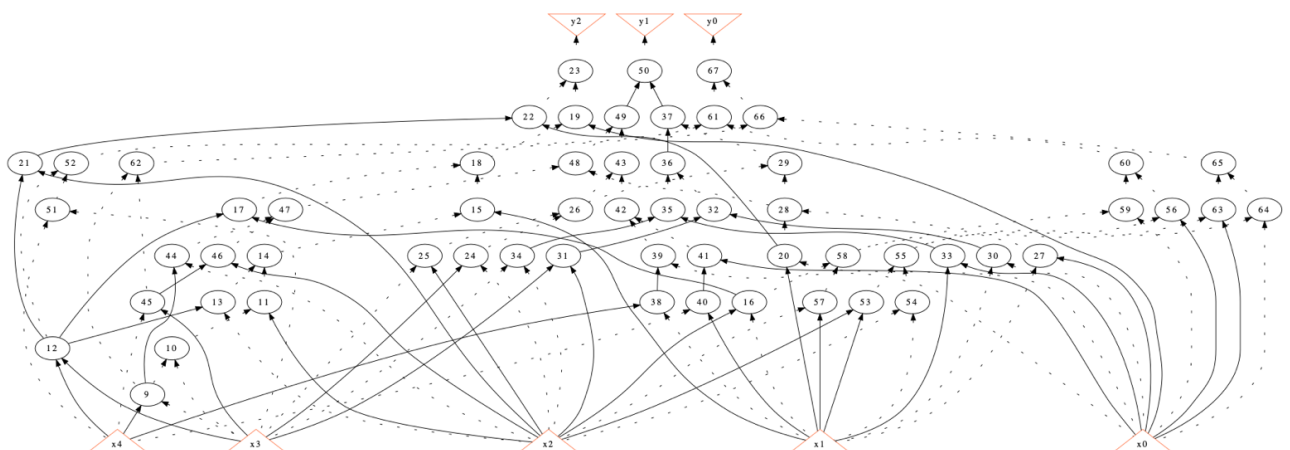
2. (b) Network Structure:

The network contains 3 logic nodes and 0 latches.

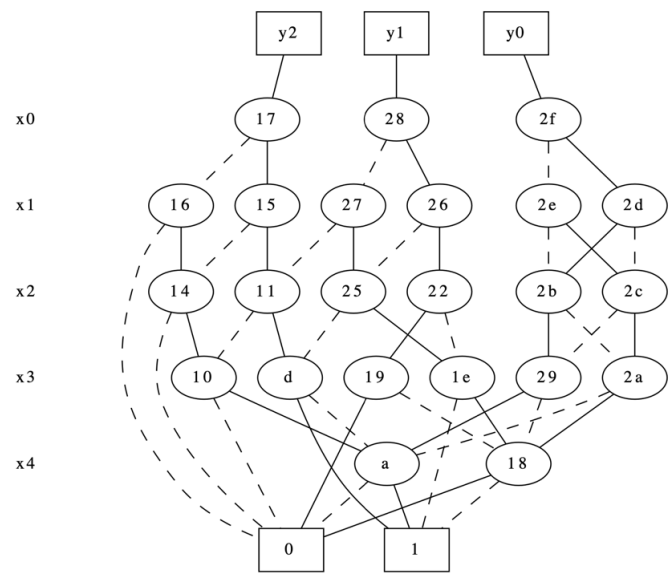


AIG:

The network contains 59 logic nodes and 0 latches.



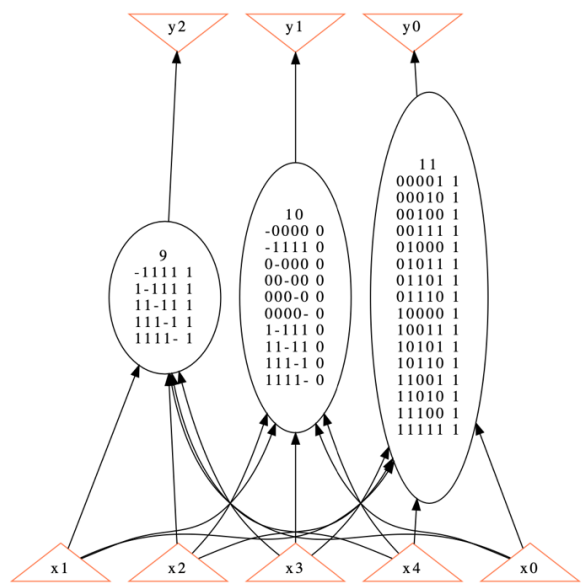
BDD:



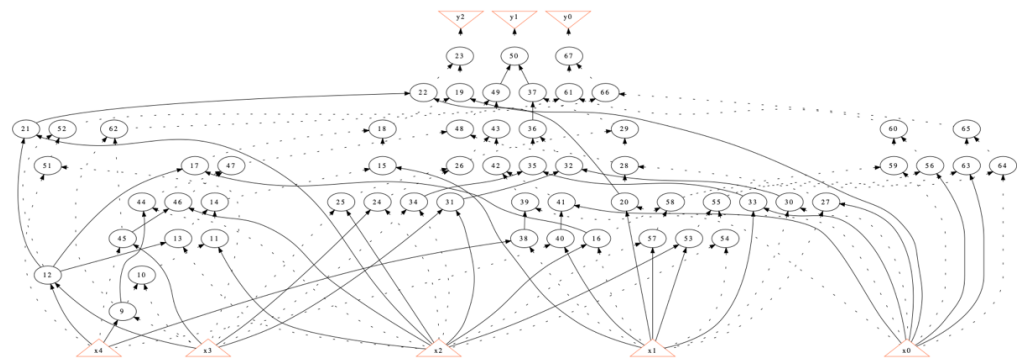
3. (a)

i. logic network in AIG vs. structurally hashed AIG

The network contains 3 logic nodes and 0 latches.

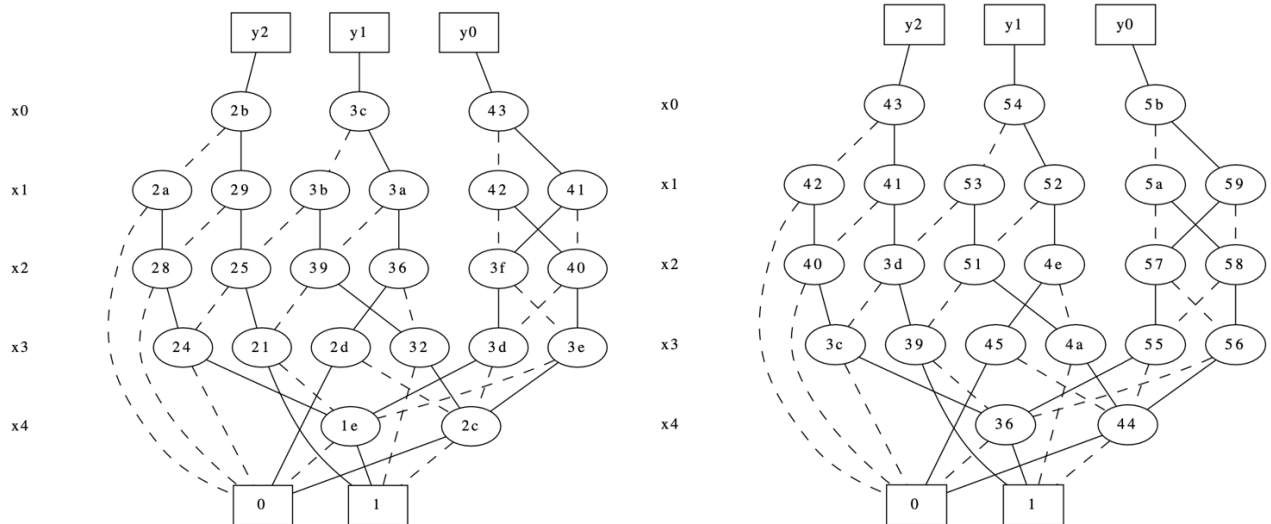


The network contains 59 logic nodes and 0 latches.



Logic network in AIG is totally different from hashed AIG.

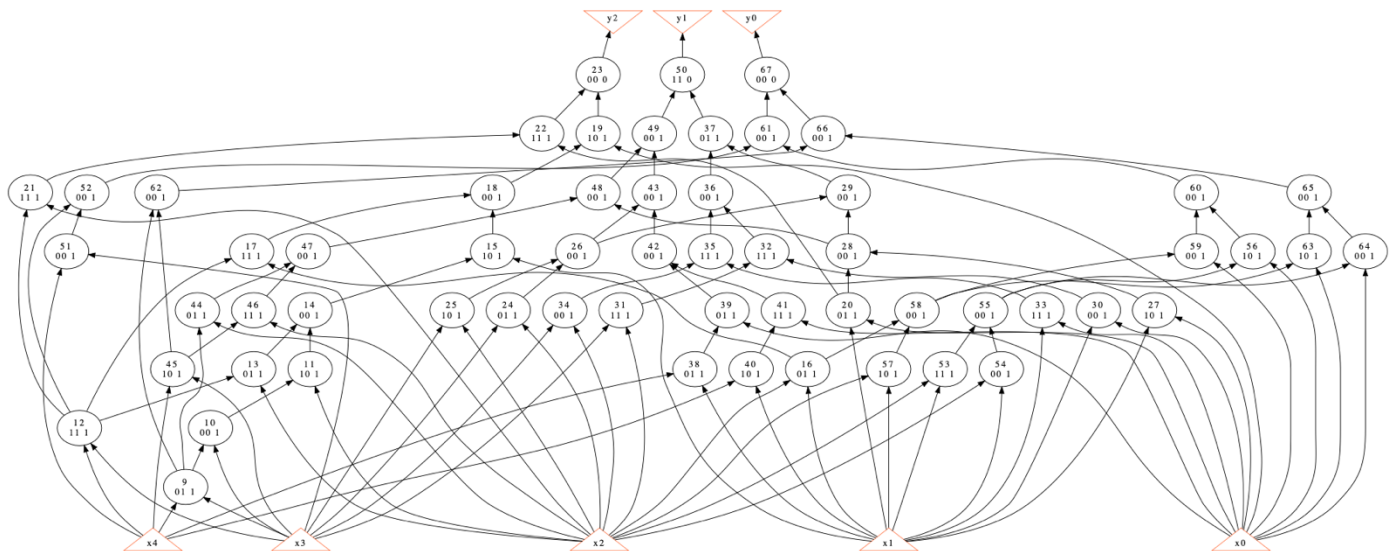
ii. logic network in BDD vs. collapsed BDD



Logic network in BDD is almost the same with Collapsed BDD.

3. (b) Convert AIG to SOP by using command “**logic**” and “**sop**”.

The network contains 59 logic nodes and 0 latches.



```

abc 01> read_blif comp.blif
abc 02> aig
abc 02> show
abc 02> gv: Unable to open the display.

abc 02> strash
abc 03> show
abc 03> gv: Unable to open the display.

abc 03> logic
abc 04> sop
abc 04> show
abc 04> gv: Unable to open the display.

abc 04> print_stats
5-to-3composer      : i/o =   5/   3  lat =   0  nd =   59  edge =   118  cube =   59  lev =  8
abc 04> quit
  
```