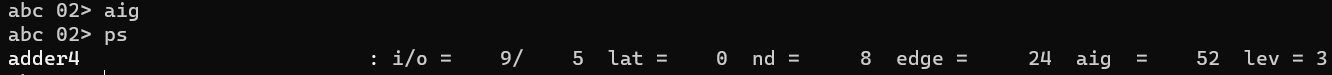
PA1\_2

(a)

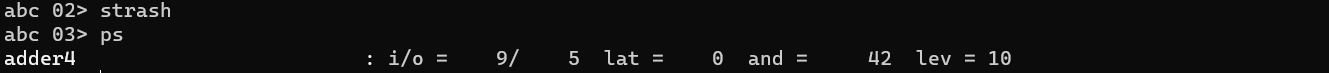
1.

The network after command aig is still a logic network, but the function of each node is represented with AIG. From the result of command print\_stats,



we can see that the network has 8 nodes, indicating the network is a logic network. Besides, it shows there are 52 and gates for aig, indicating that the function of each node is represented with aig.

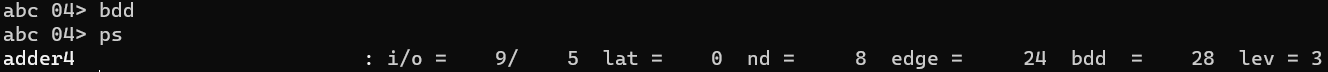
The network after command strash is an AIG. From the result of command print\_stats,



we can see that the network now contains only and gates, indicating that it’s an AIG now.

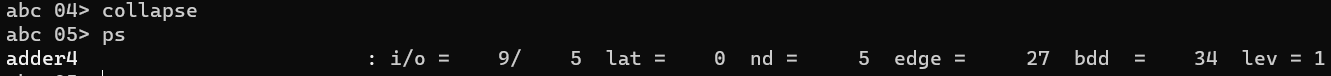
2.

The network after command bdd is still a logic network, but the function of each node is represented with BDD. From the result of command print\_stats,



we can see that the network has 8 nodes, indicating the network is a logic network. Besides, it shows the statistics of bdd, indicating that the function of each node is represented with BDD.

The network after command collapse is an BDD. From the result of command print\_stats,



we can see that the number of nodes and edges changed and there’s a statistic for bdd, indicating that the network it’s an BDD now.

(b)

The command “logic” will convert an AIG into a logic network with node function expressed in SOP.