RIAD 5:

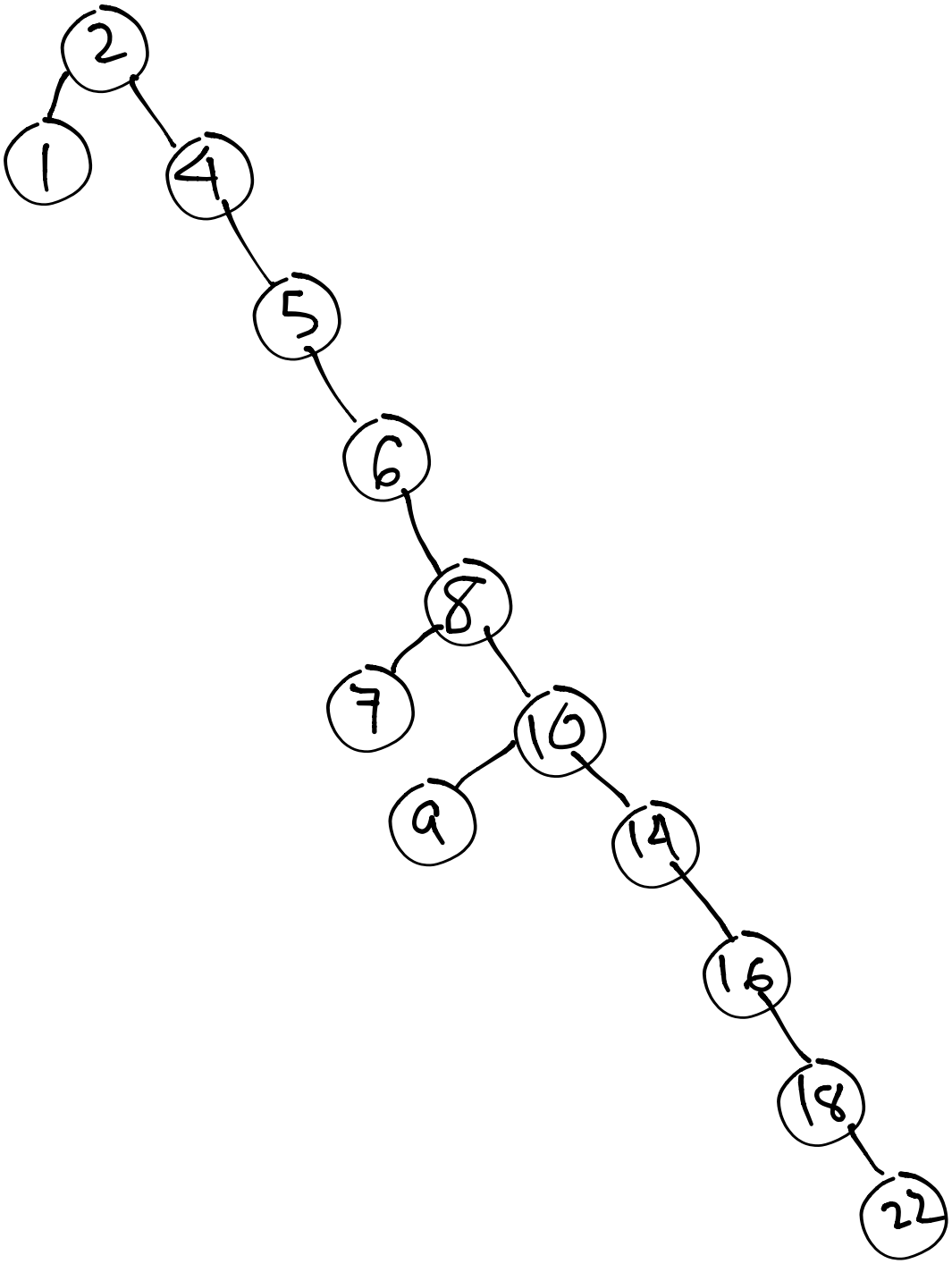
a.) Similar like RAID 4, but the parity block resides on alternating disks.

b.) Yes if the blocks to write are not the same.

c.) Yes if the blocks accessed are different and the parities are stored on different disks.

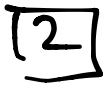
d. Same as RAID 4 = 6s

A. Simple Binary Tree

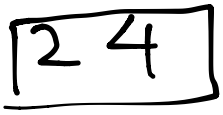


B. B-Tree 2-3

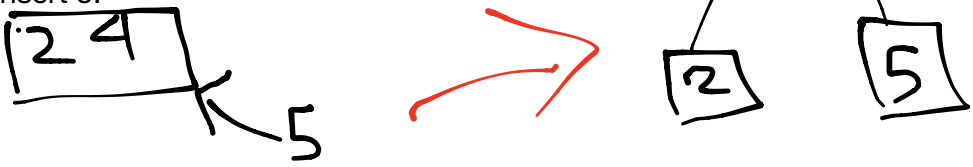
Insert 2:



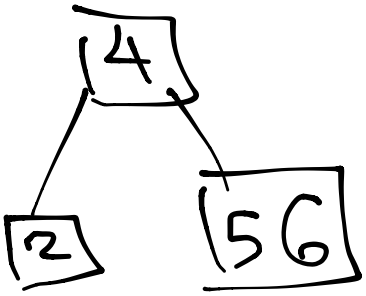
Insert 4:



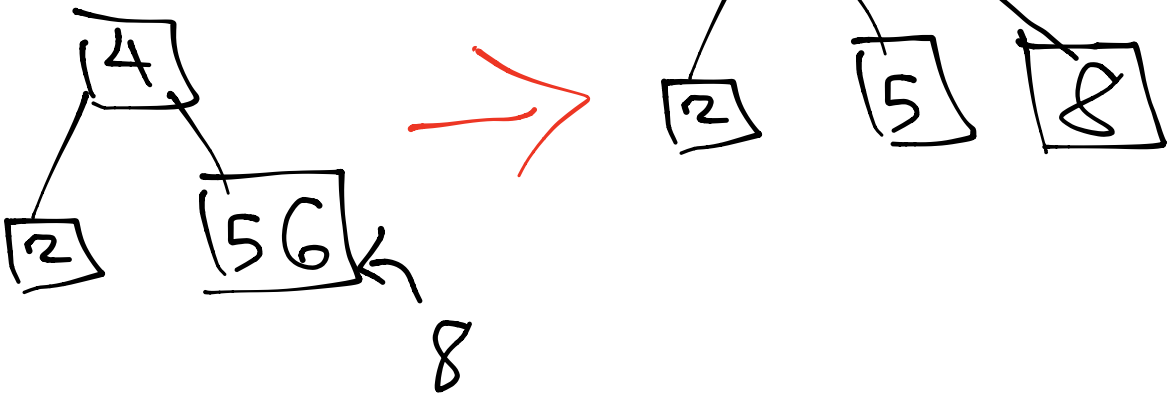
Insert 5:



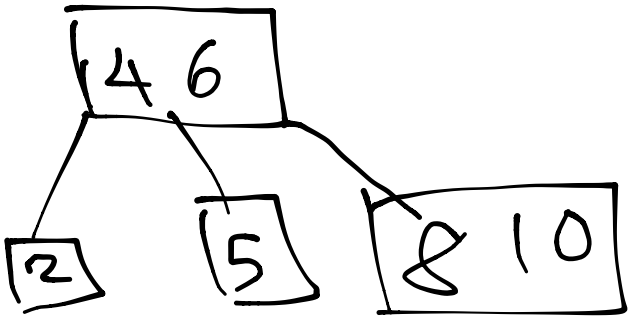
Insert 6:



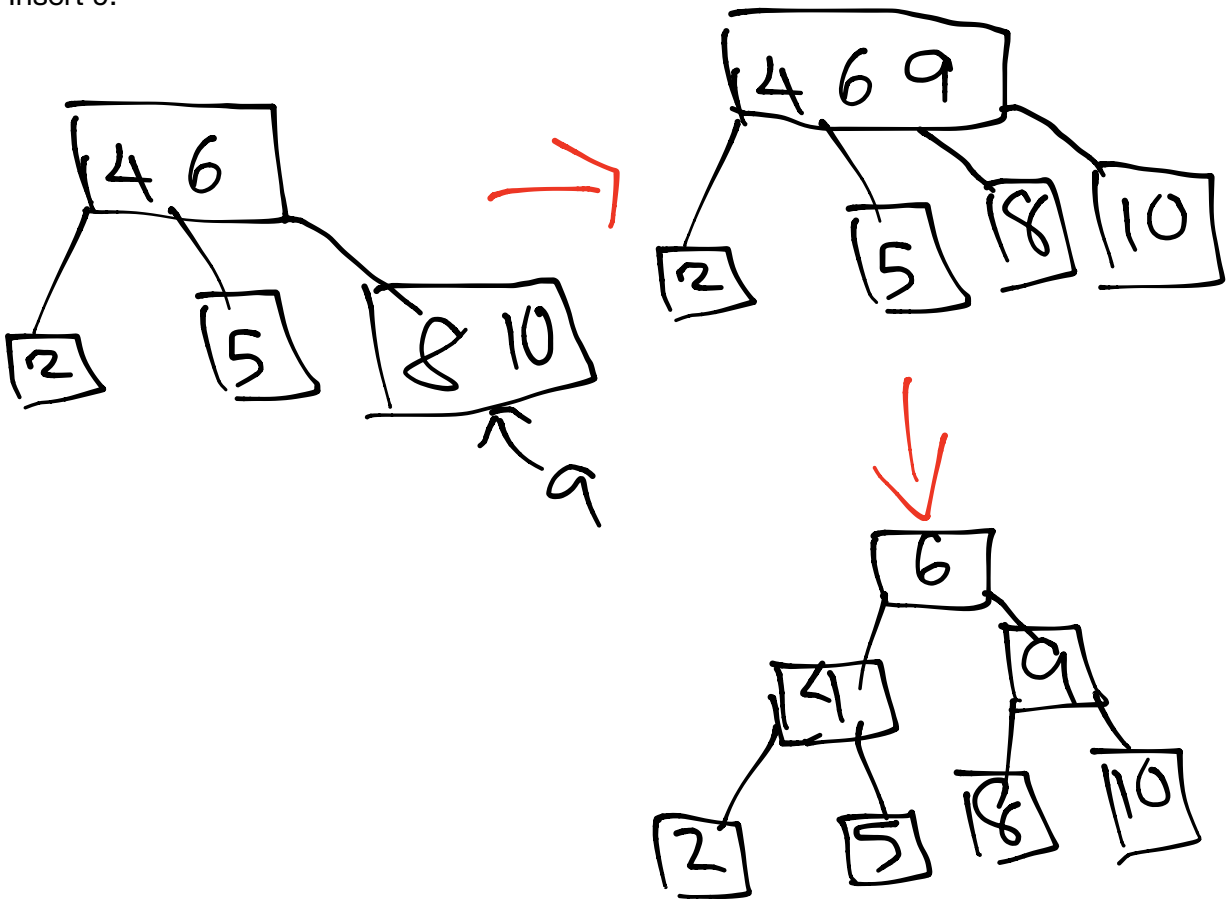
Insert 8:



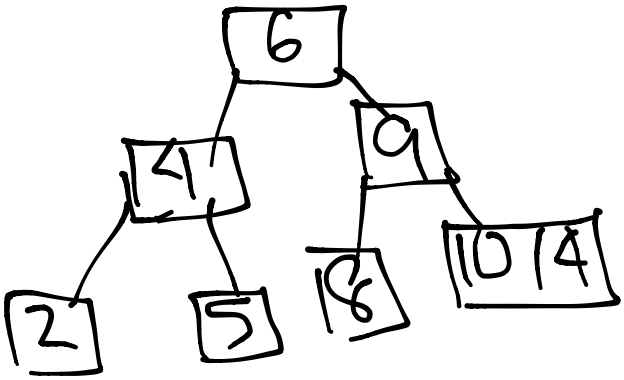
Insert 10:



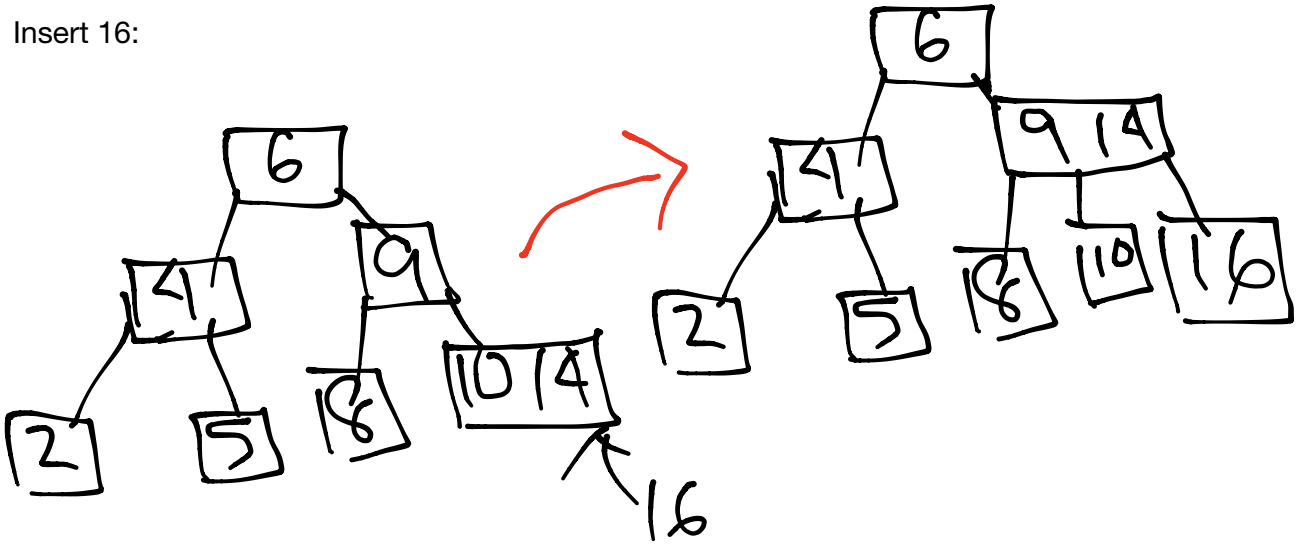
Insert 9:



Insert 14:



Insert 16:



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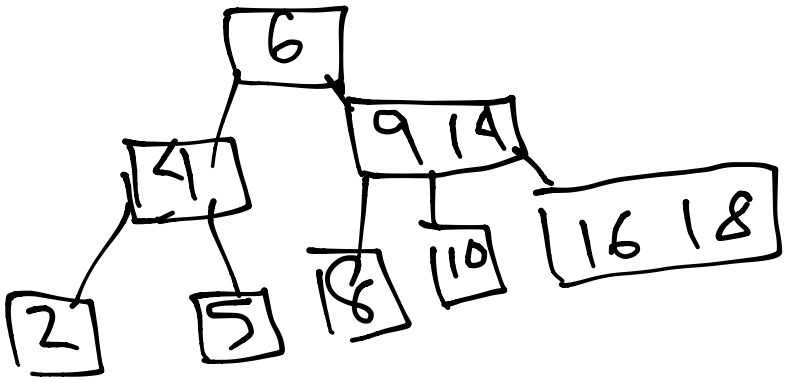

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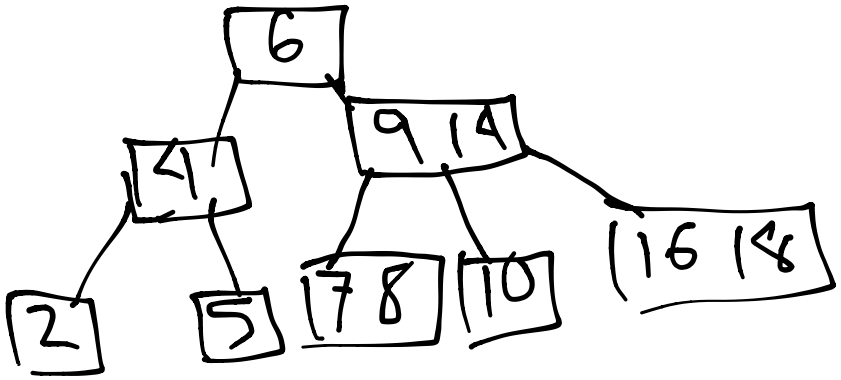
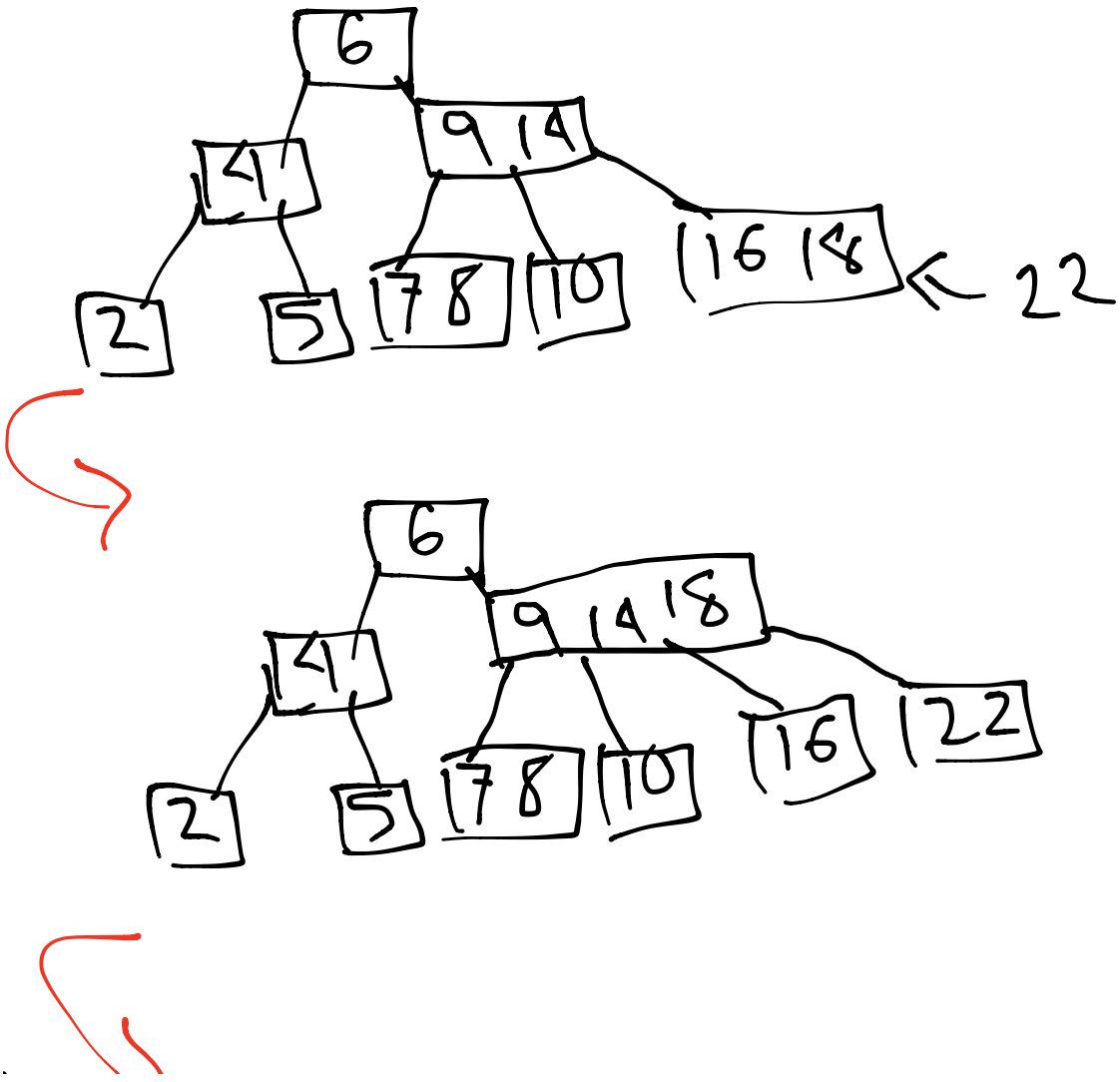
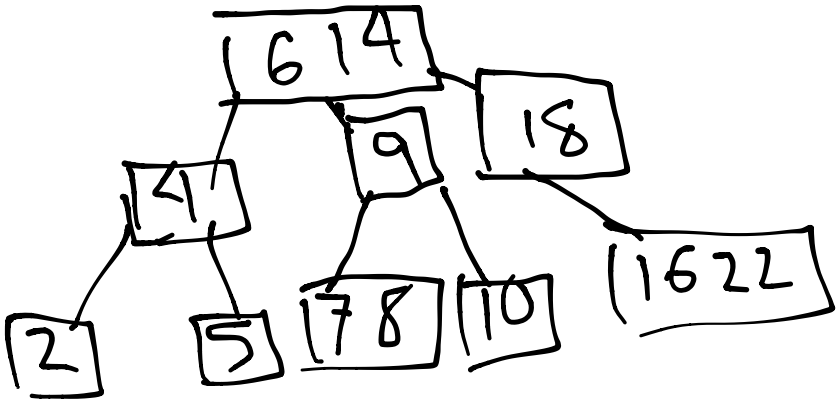
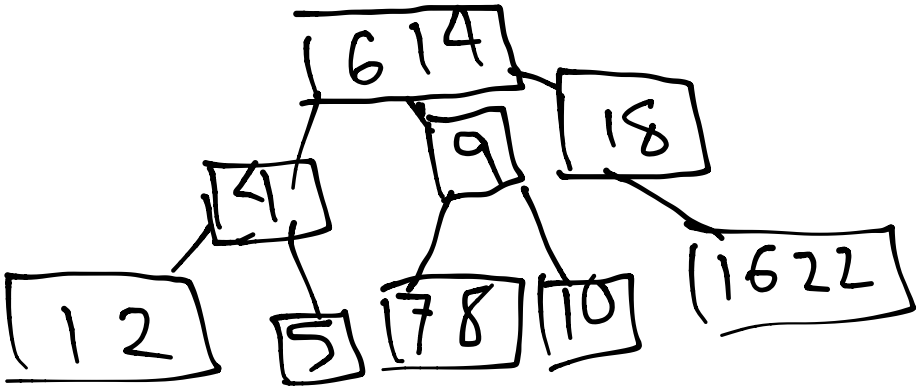


Insert 22:





Insert 1:



C. The main difference between the simple binary tree and and B-Tree 2-3 is that a simple binary tree can only have 2 child nodes max while 2-3 has more. The advantage of B-Tree is that searching is faster since each node can contain 2 data.