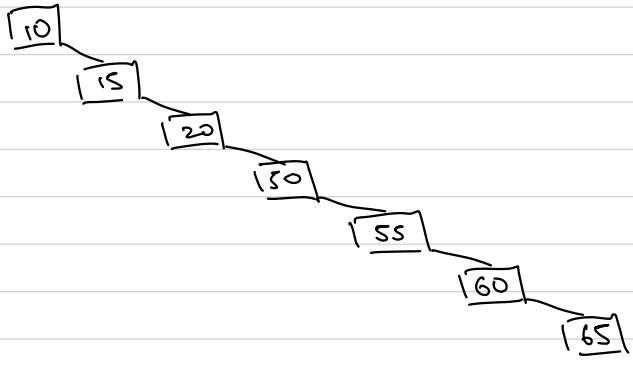
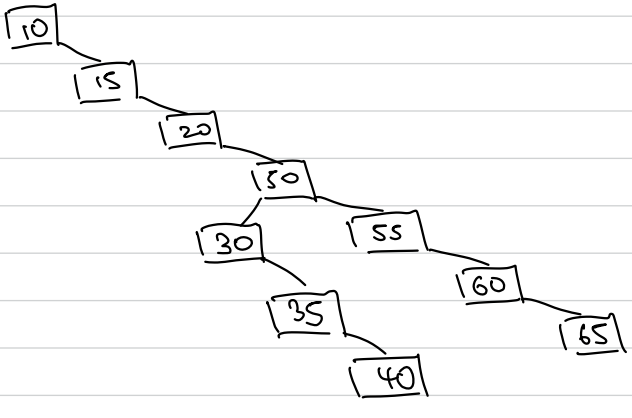
Question Two.

i) Binary Search Tree.

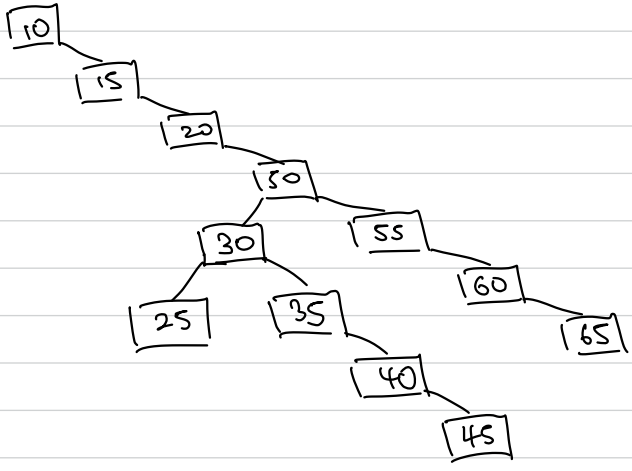
- Insert 10, 15, 20, 50, 55, 60, 65



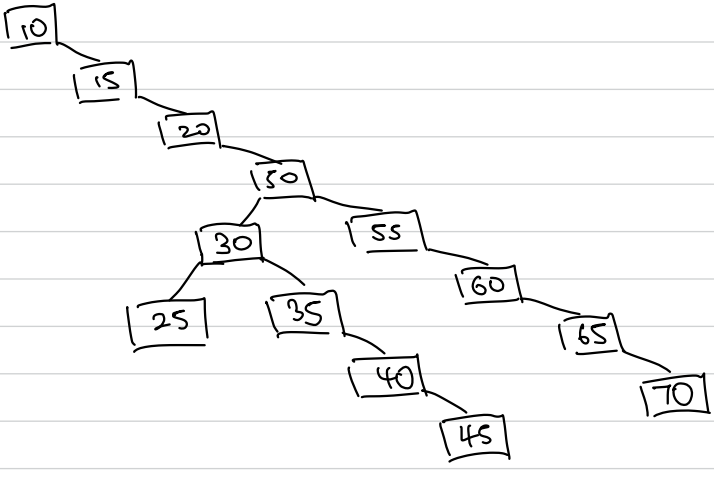
- Insert 30, 35, 40



- Insert 25, 45



- Insert 70

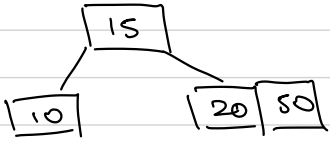


ii and iii) 2-3-4 Tree and Red-Black Tree. *Using 2-3-4 tree to convert to Red-black Tree

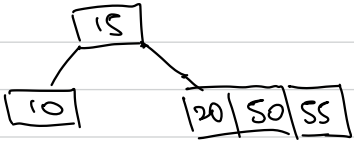
- 2-3-4 Tree

- Insert 10, 15, 20

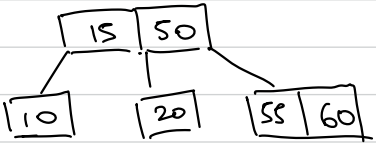
- Insert 50



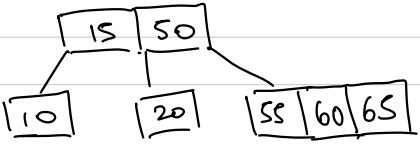
- Insert 55



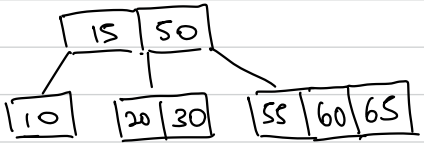
- Insert 60



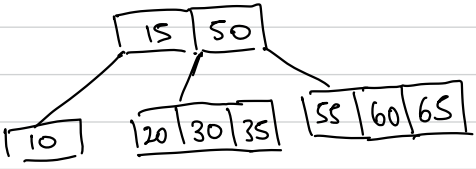
- Insert 65



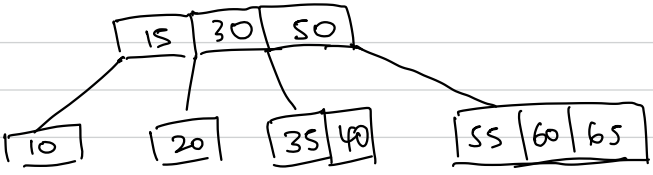
- Insert 30



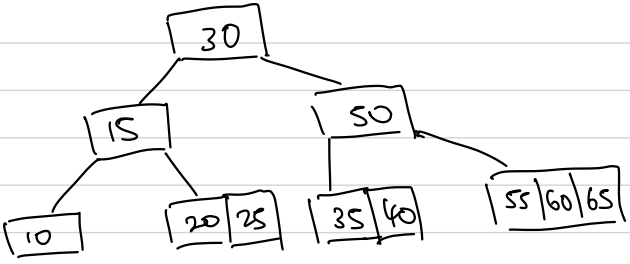
- Insert 35



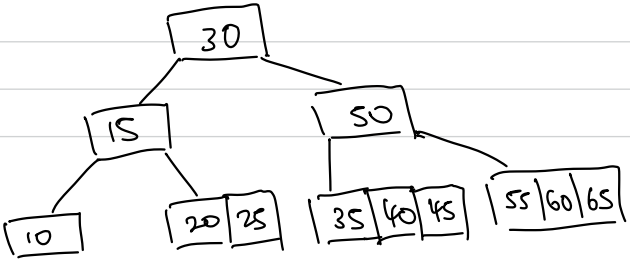
- Insert 40



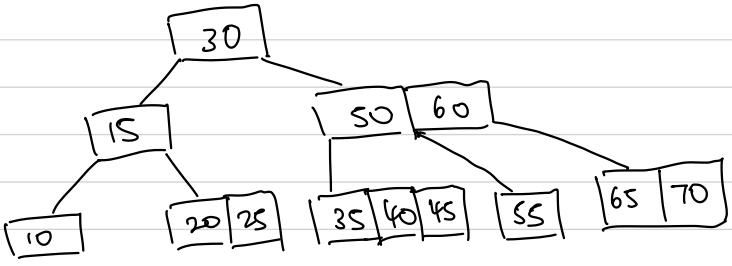
- Insert 25



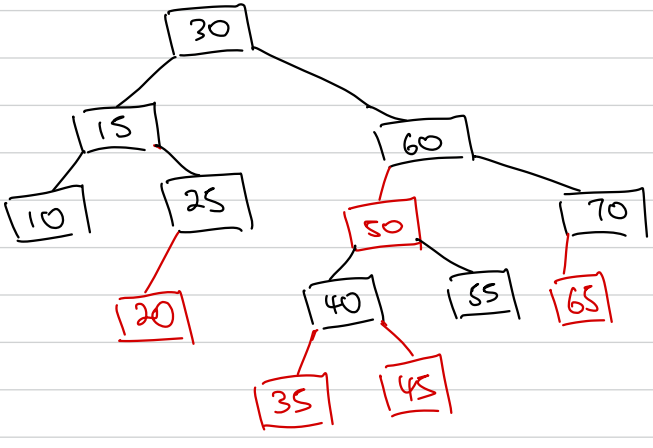
- Insert 45



- Insert 70



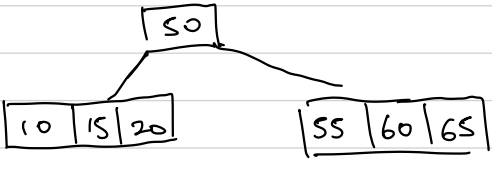
- Red-black Tree (converted using 2-3-4)



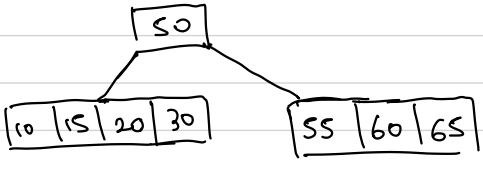
iv) B-Tree (6 keys per Node)

- Insert 10, 15, 20, 50, 55, 60

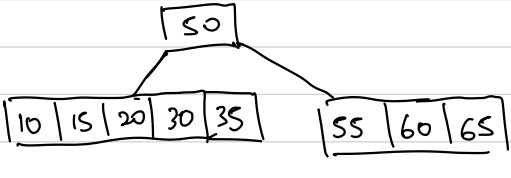
- Insert 65



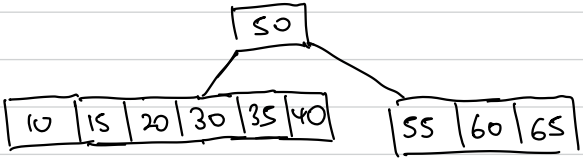
- Insert 30



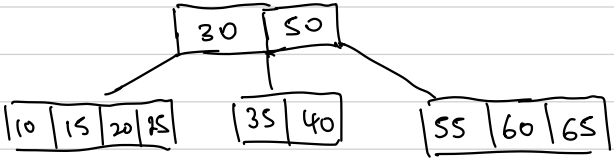
- Insert 35



- Insert 40



- Insert 25



- Insert 45, 70