

Class: 180 B Database Systems

B+ tree of class with degree 5

1) Initially the tree is empty.



2) Inserting 2 into the tree.



3) Inserting 6



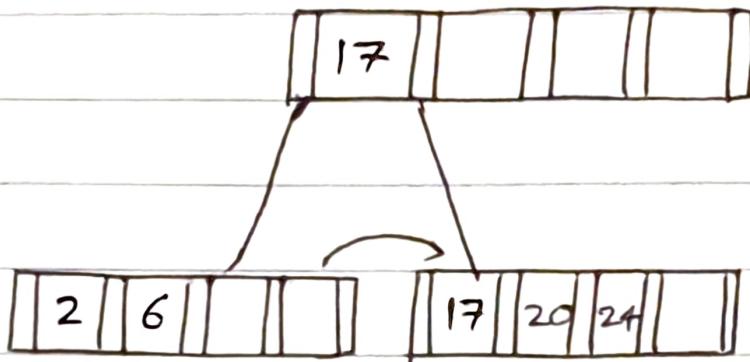
4) Inserting 17



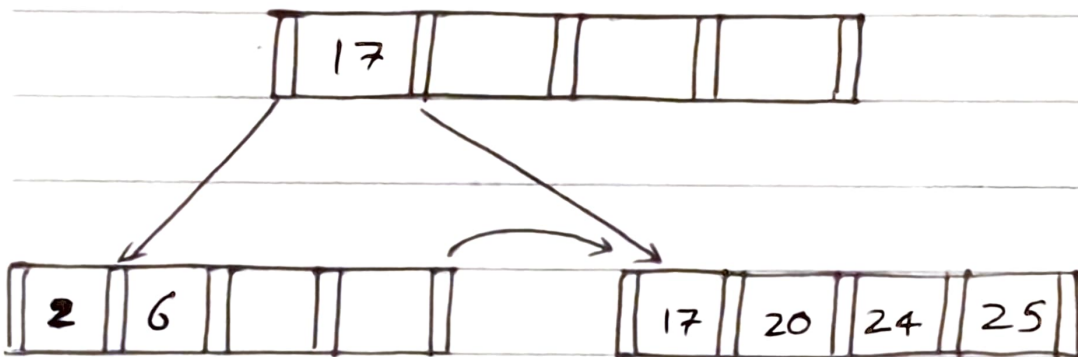
5) Inserting 20



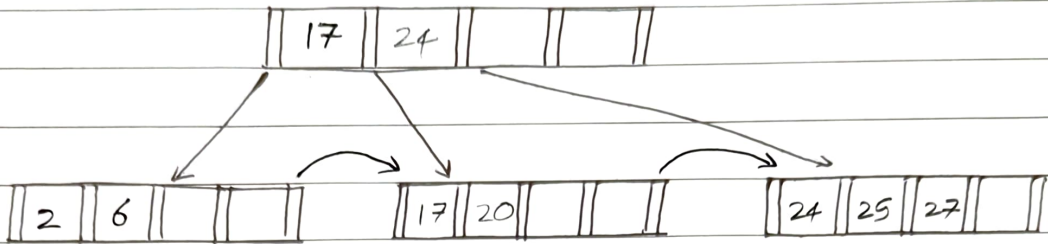
6) Since the node is full, we split on the basis of middle element



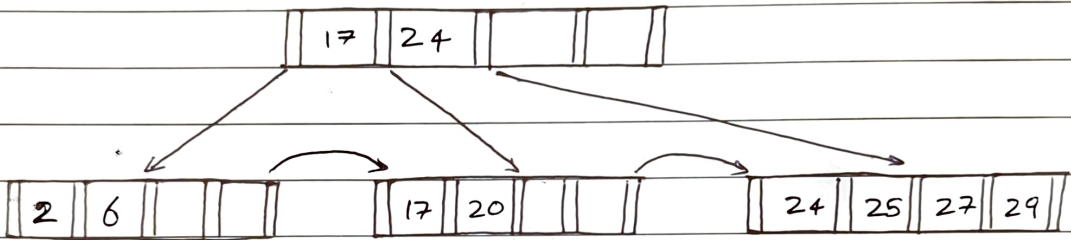
7) Insert 25



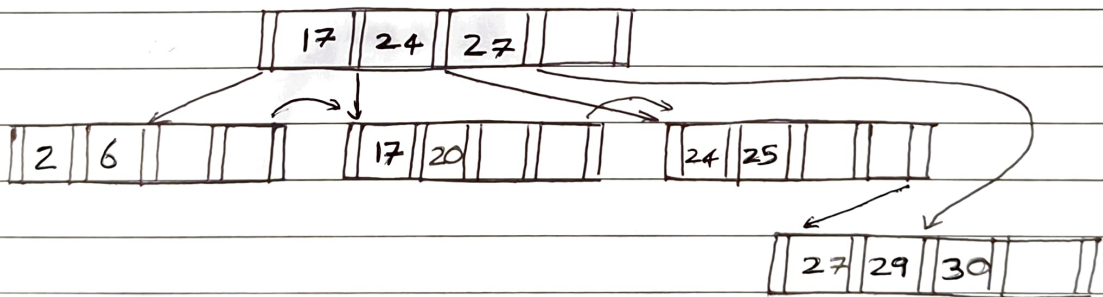
8) Insert 27 (split by middle element)



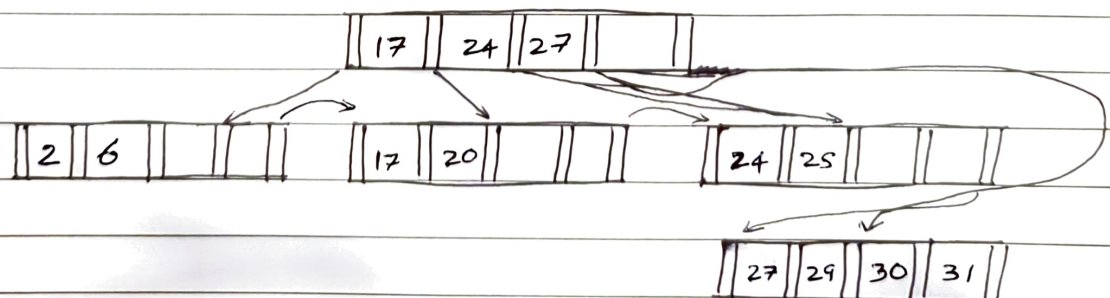
9) Insert 29



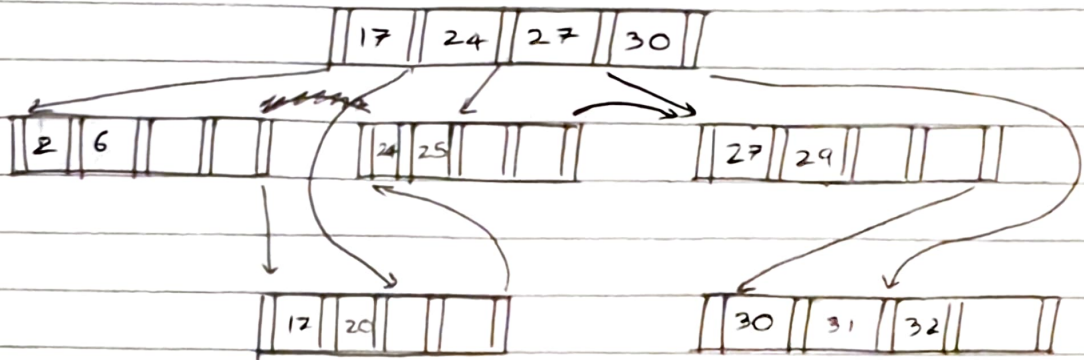
10) Insert 30 (split by middle element)



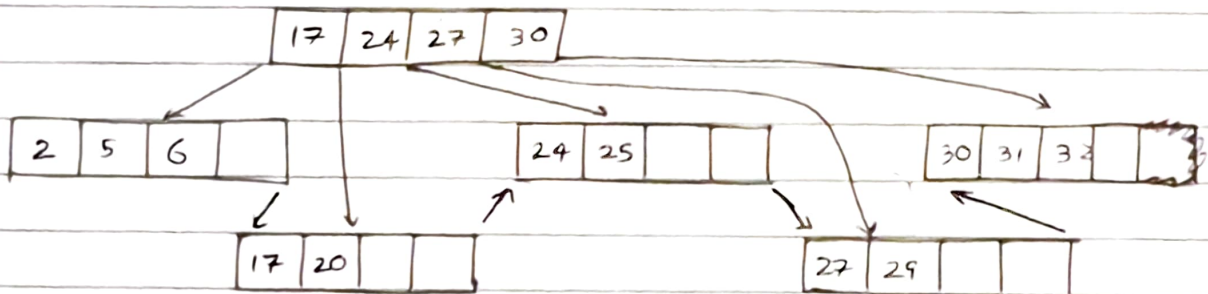
11) Insert 31



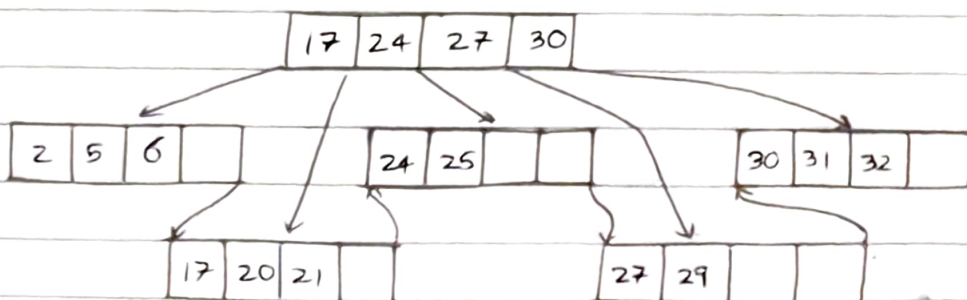
12) Insert 32 (Move middle element)



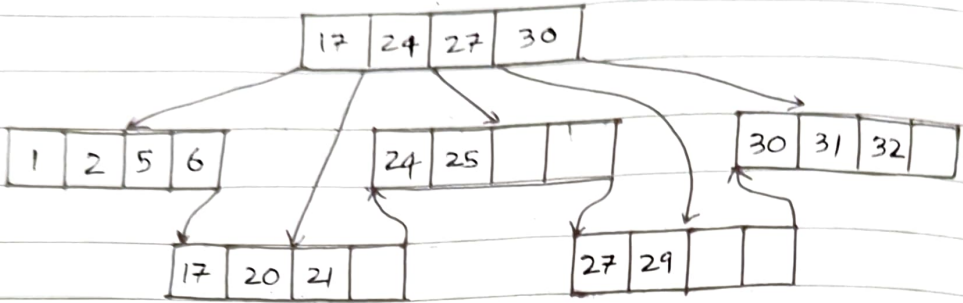
13) Insert 5



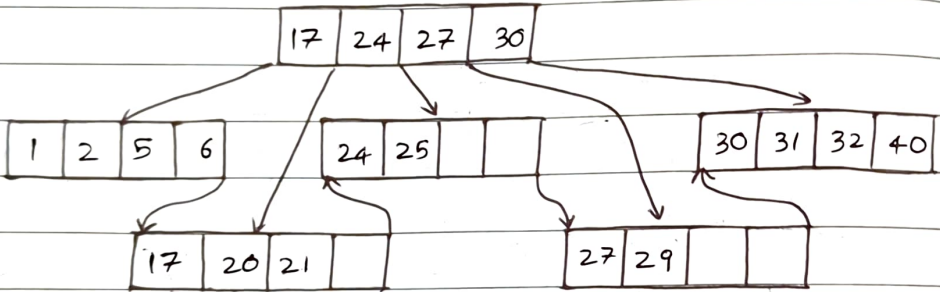
14) Insert 21



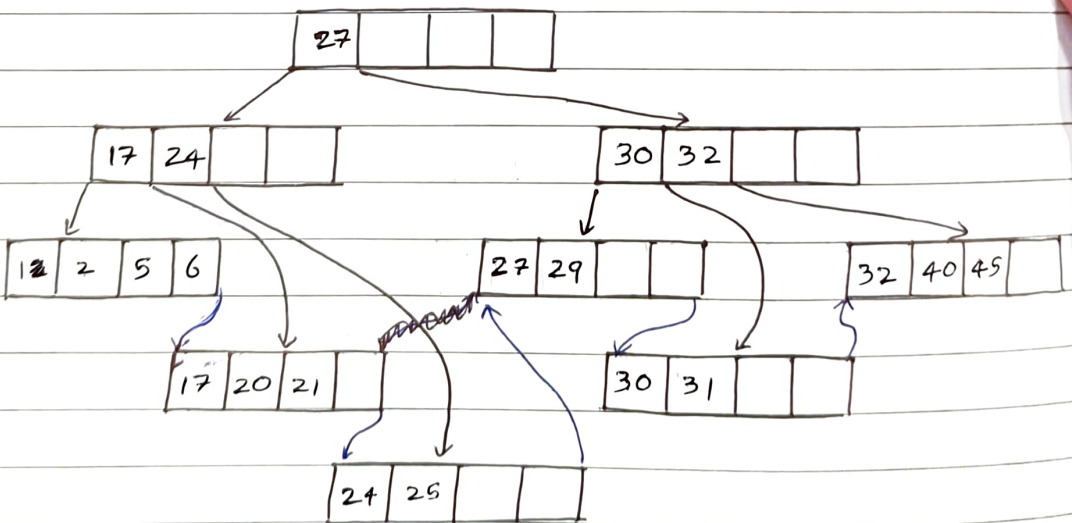
15) Insert 1



16) Insert 40

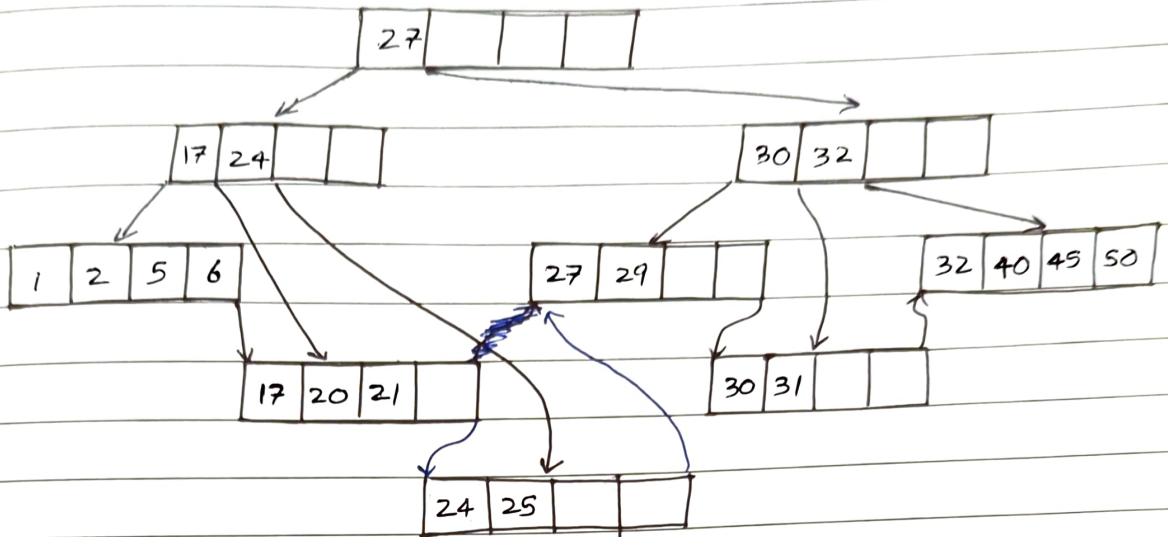


17) Insert 45

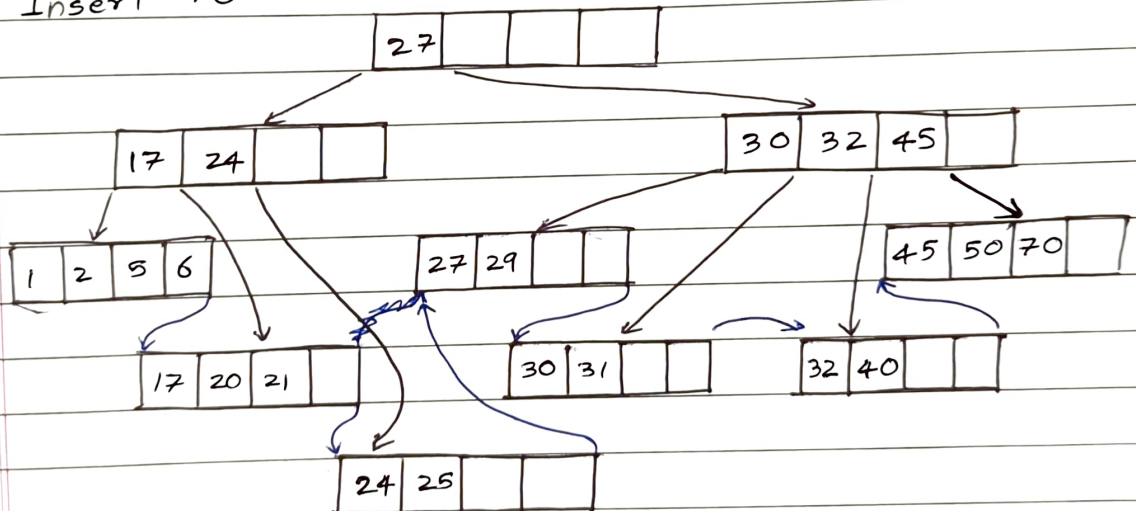




18) Insert 50

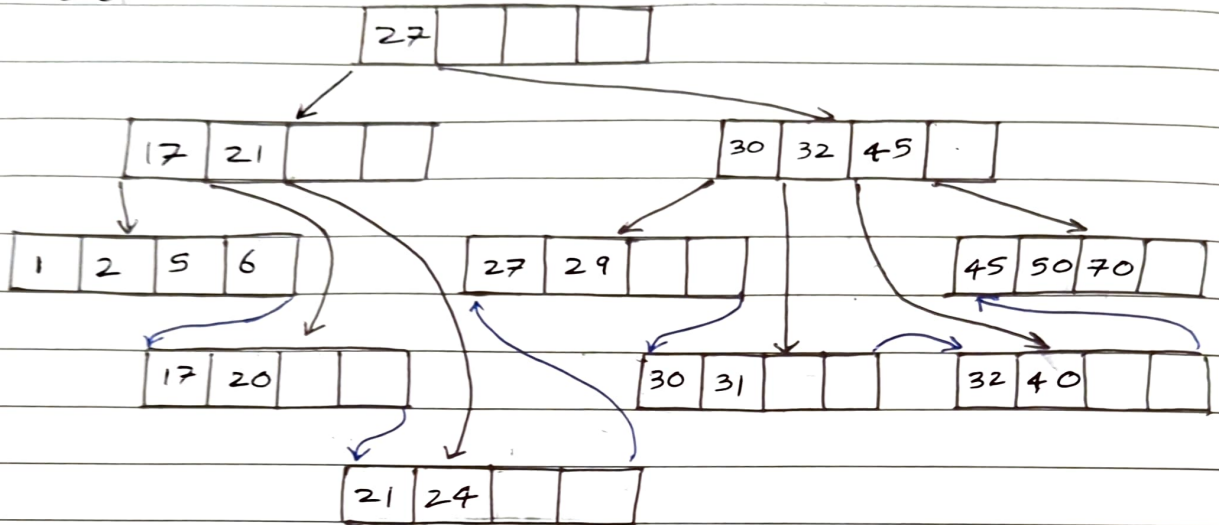


19) Insert 70

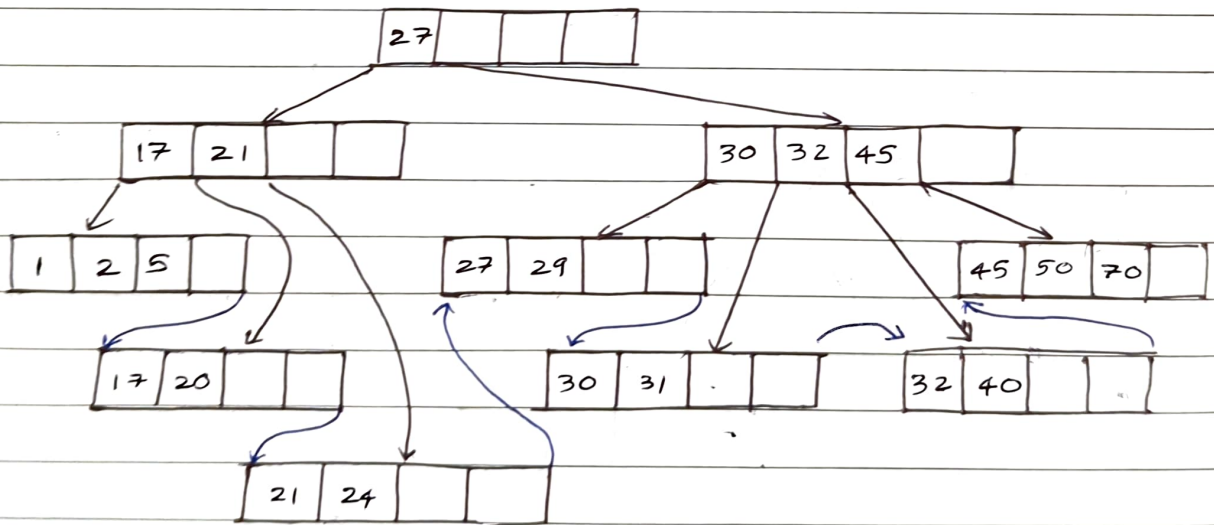


19) ~~Insert 45~~

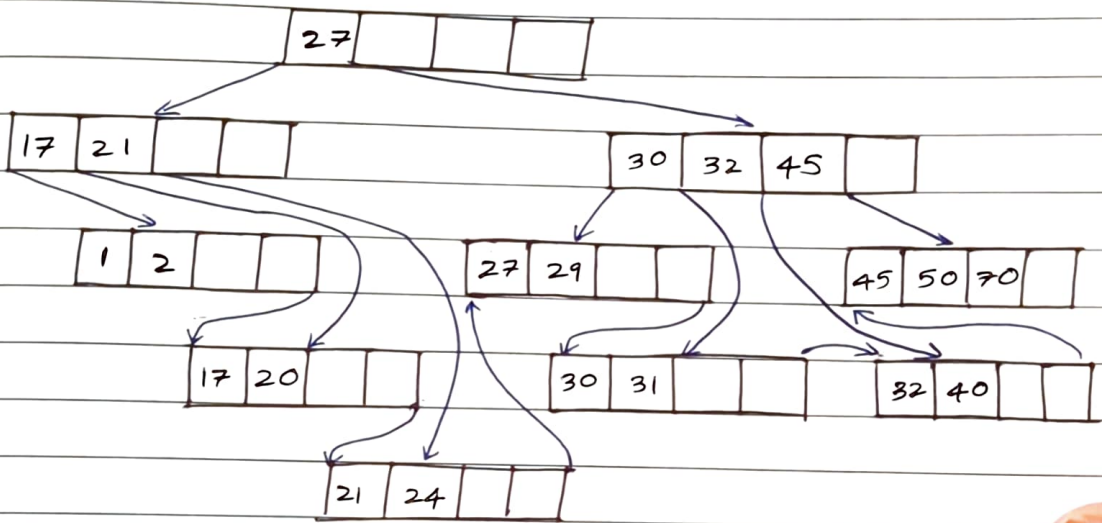
20) Delete 25



21) Delete 6



22) Delete 5



23) Delete 20

