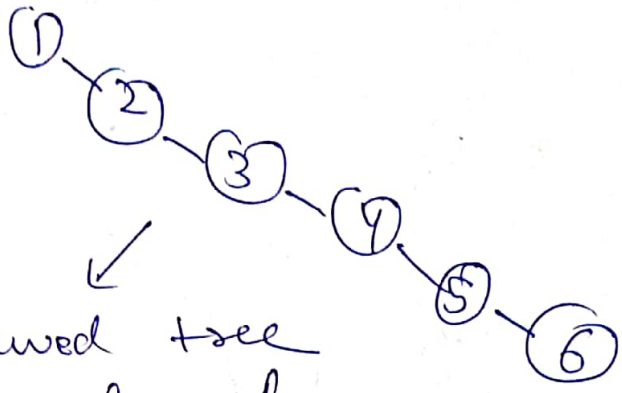
Akash Anand
11912057
IT

Approach for solving Problem

If we make simple BST



This skewed tree would be formed.

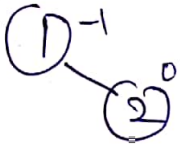
Approach

To reduce the searching complexity →

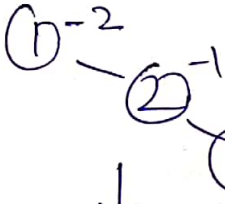
Each step we check whether the currently formed B.S.T is ~~skewed~~ balanced or not.

Lets start

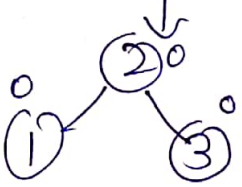
→ Balanced
→ move forward



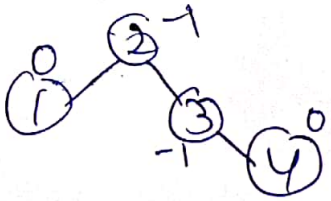
→ Balanced
→ continue



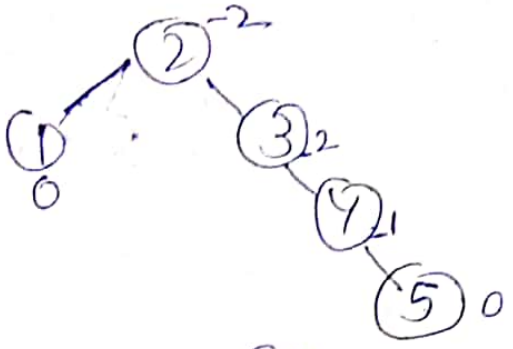
→ unbalanced
→ perform rotation (RR)



→ Balanced
→ continue

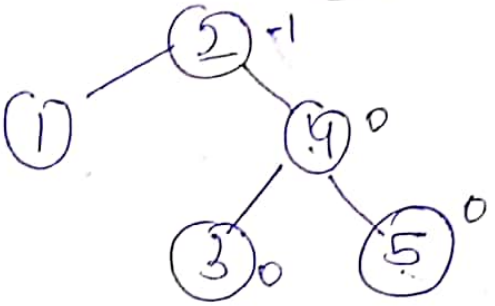


→ balanced
→ continue



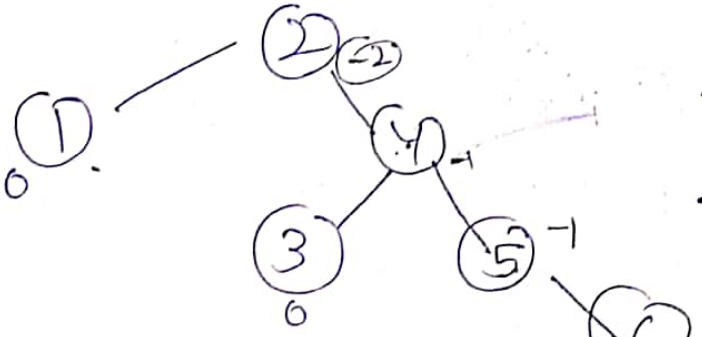
→ unbalanced

→ perform rotations (RR)



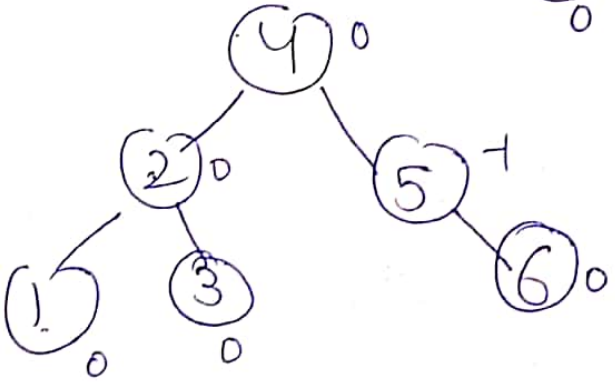
→ balanced

→ move forward



→ unbalanced

→ rotate (RR)



→ balanced