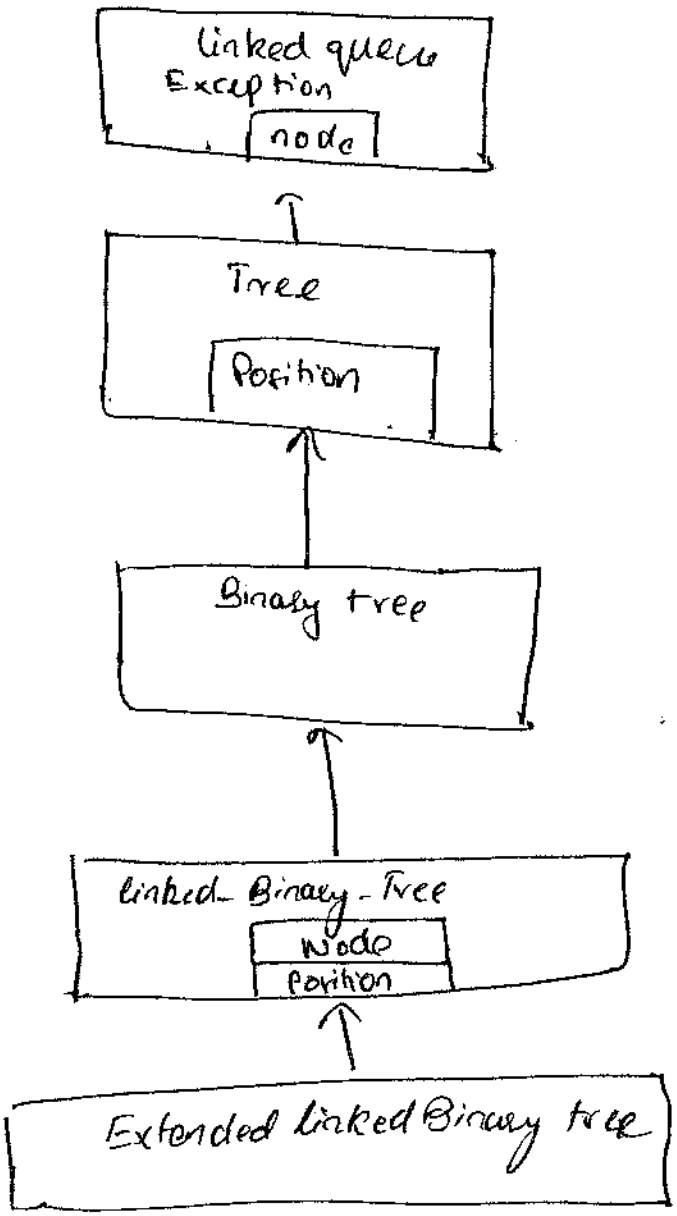
Nirdesh Ghandali

Project 2.

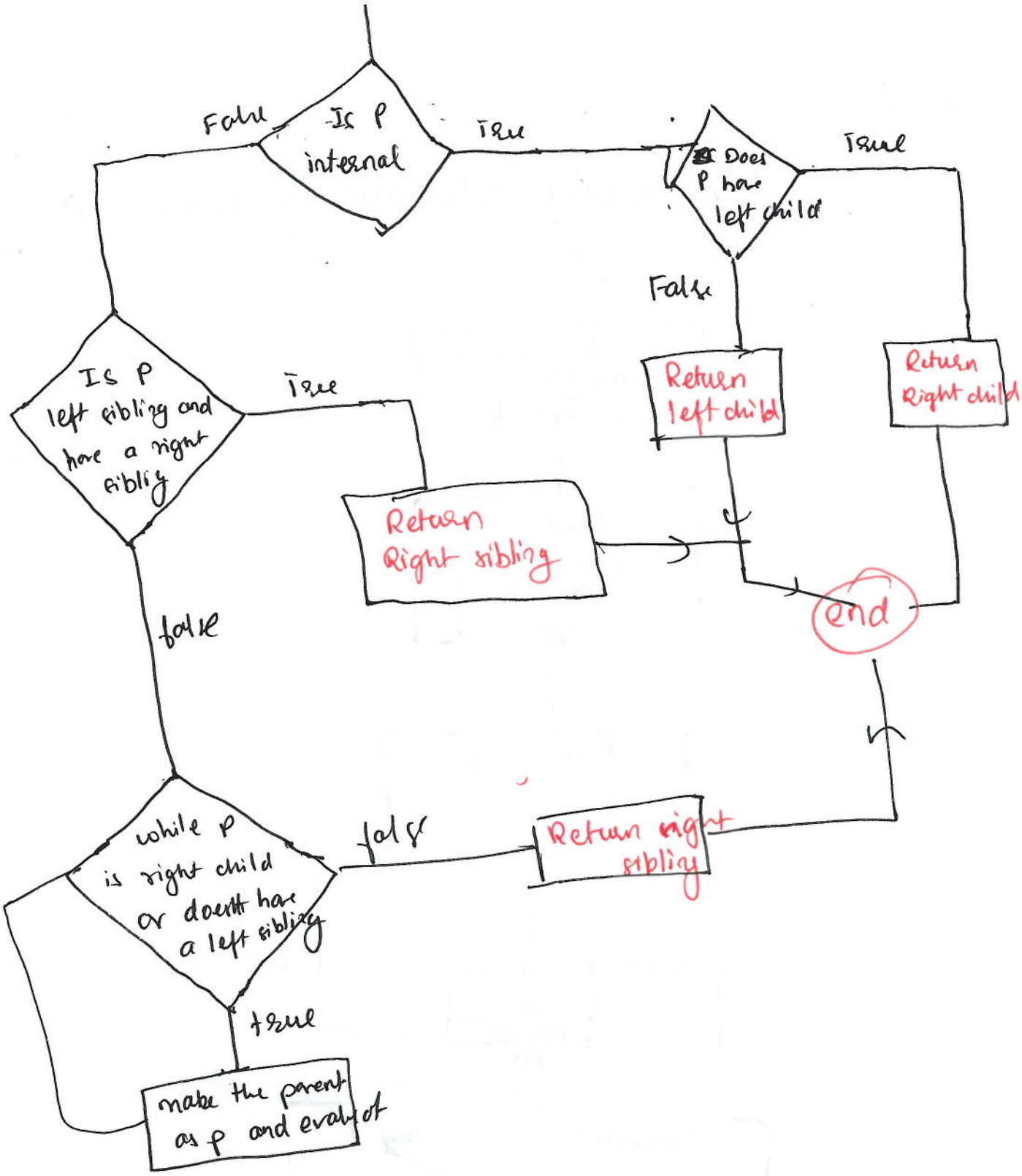
Part 1

Hierarchy structure of classes used.

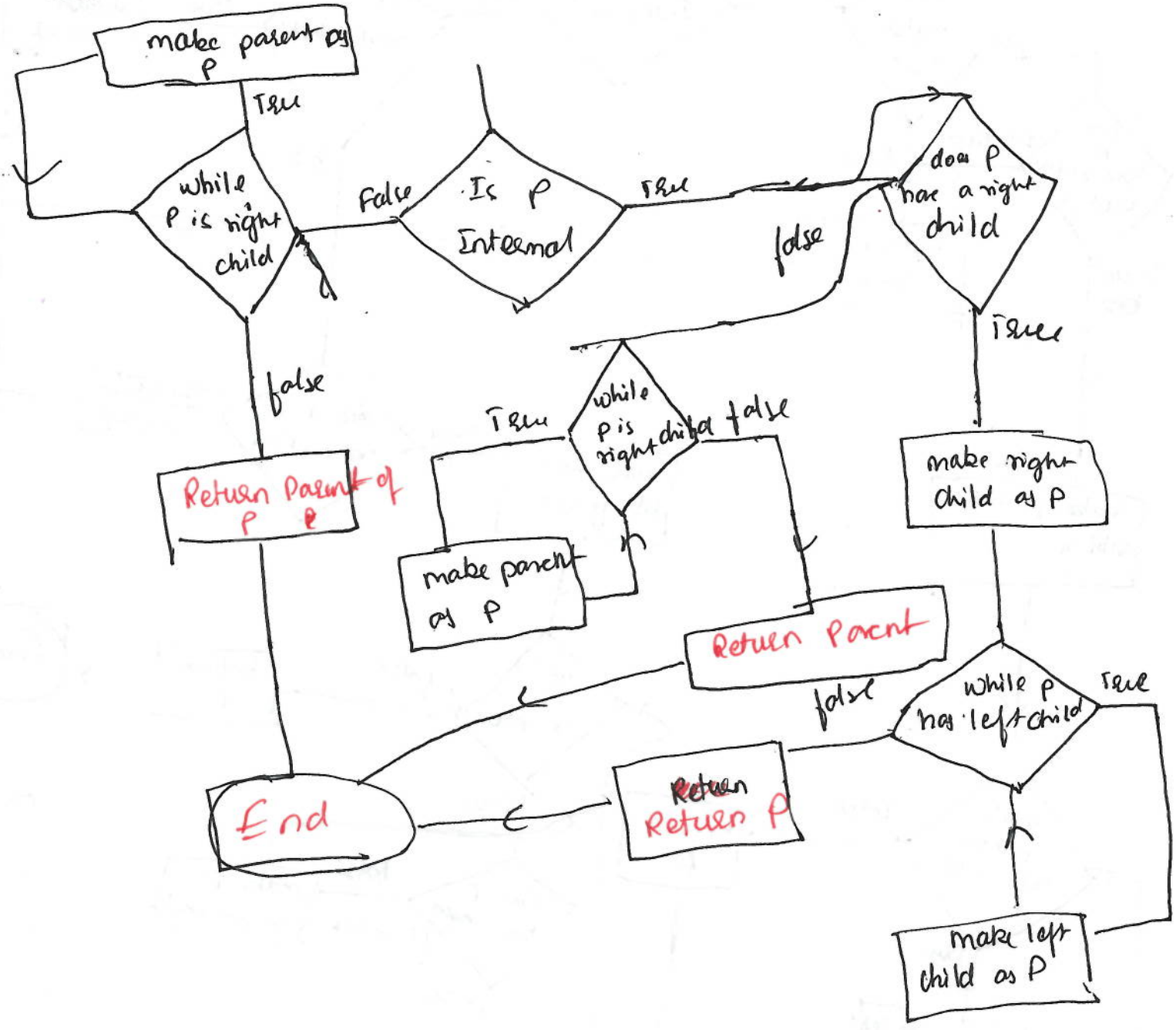


Part (2)

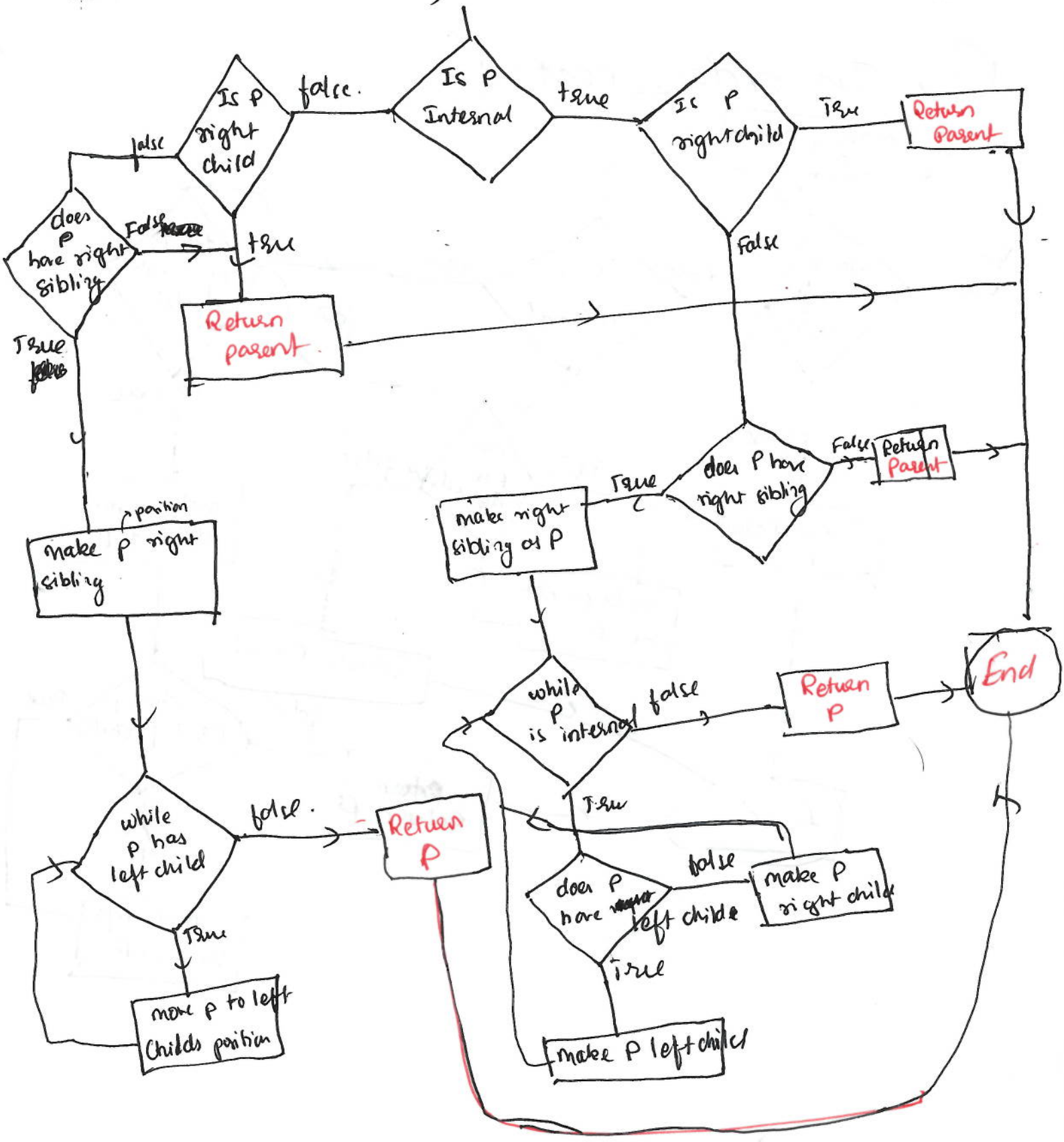
a) Pre_orders next



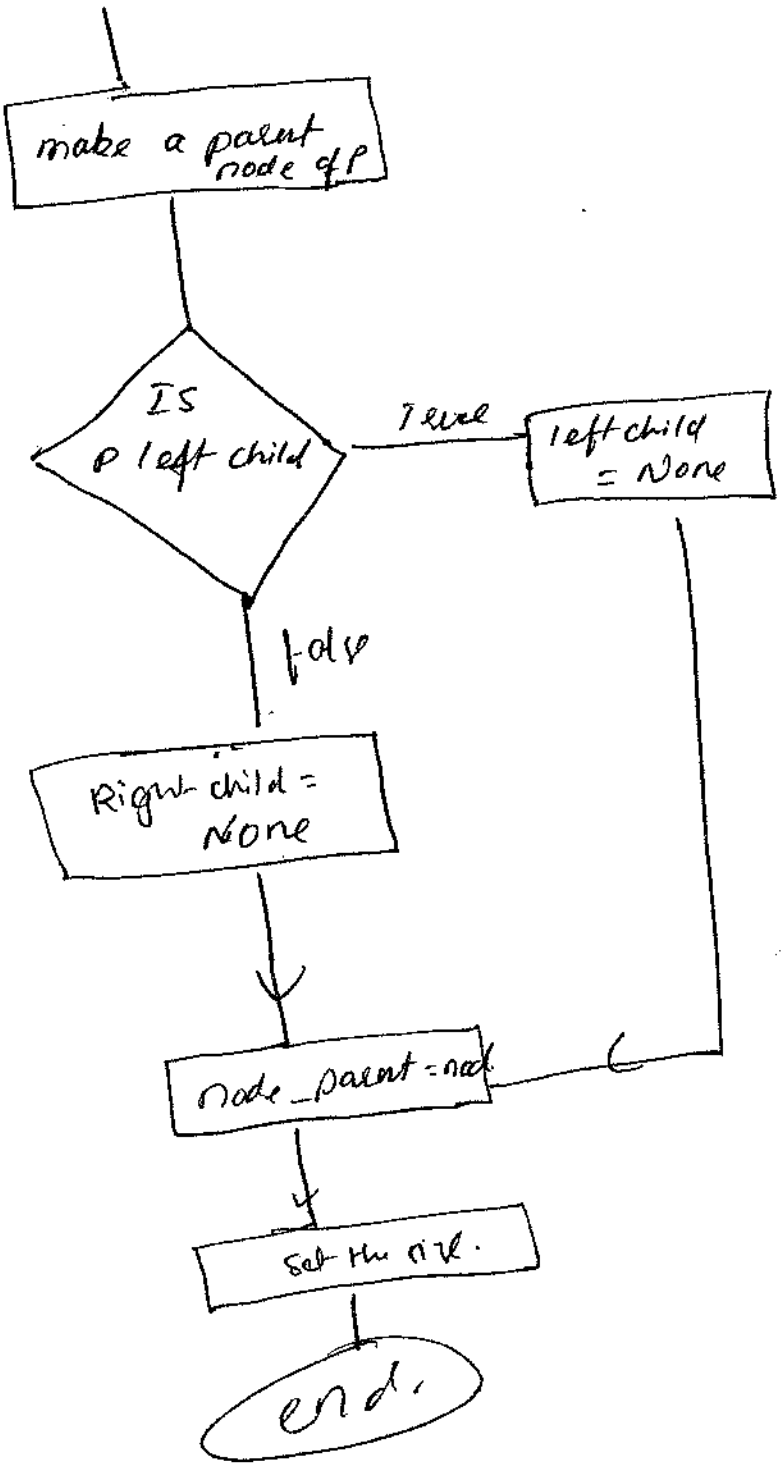
(2) In order_next( ) :



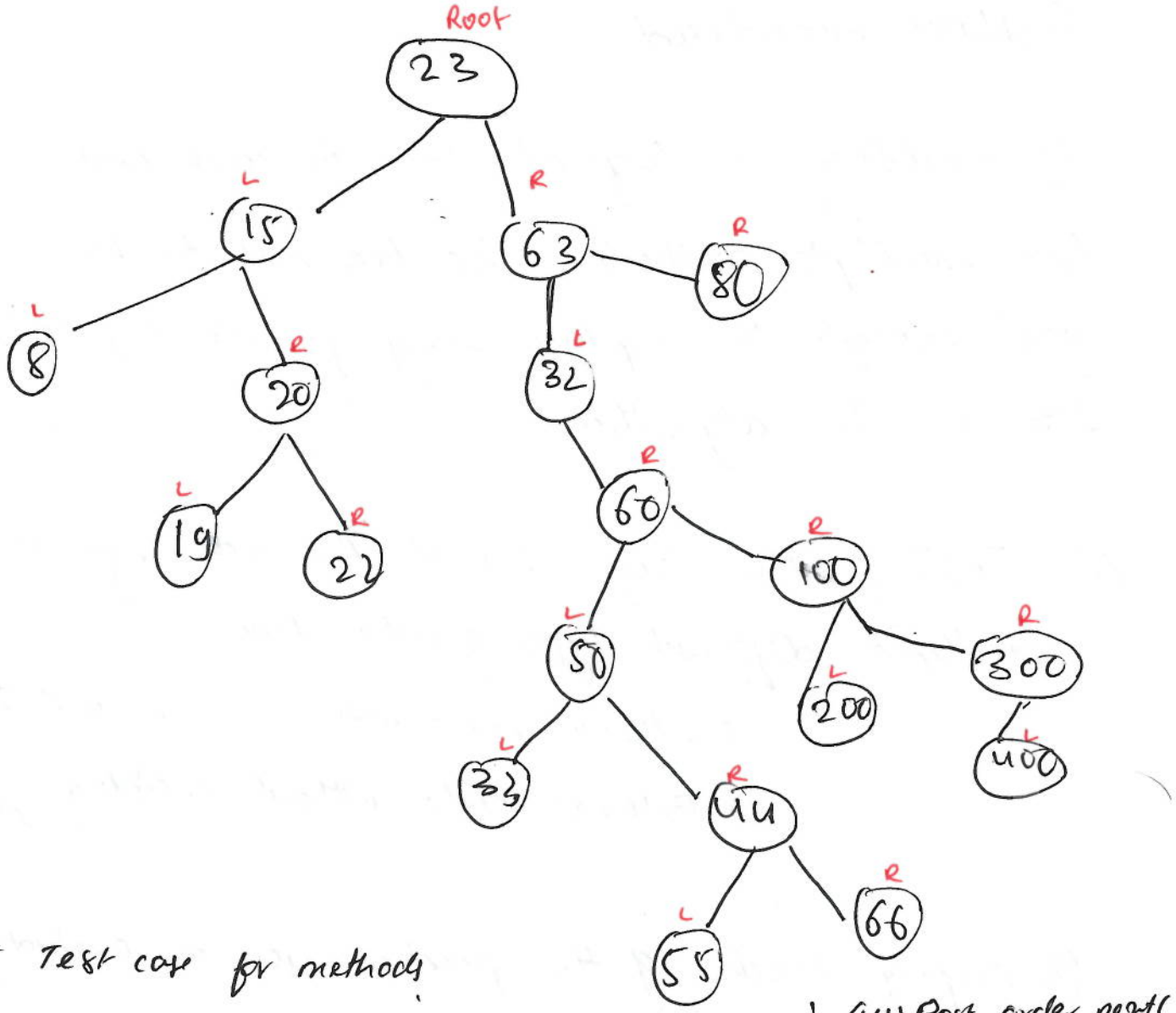
③ Postorder_next()



(4) delete_subtree(self, p)



Part 3. Binary tree used.



Test case for methods

	(i) Preorder_next( )	(ii) Inorder_next( )	(iii) Post_order_next( )
Internal without sibling	60 (50)	60 (200)	60 (32)
Internal with sibling	50 (33)	50 (55)	50 (200)
External without sibling	400 (80)	400 (300)	400 (300)
External without sibling	33 (44)	33 (50)	33 (55)

(iv) Delete_subtree( ) = Delete_subtree(32).

Part (4)

Problems encountered:

(1) Building a logical tree to cover and test multiple methods. The tree had to be good enough to capture every possible logical flaw in the algorithm

(2) Testing the logic behind the code against multiple different types of nodes like:

- internal node with a parent with 1 sibling
- External node without a sibling, etc...

(3) keeping track of the position you are evaluating.