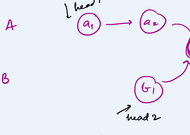
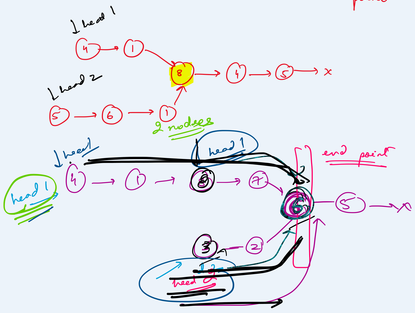
Ques:

Given two heads of a LL



find intersection point



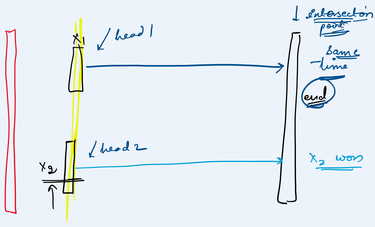
Approach (1):

(a) Store all elements of L_1 in a set

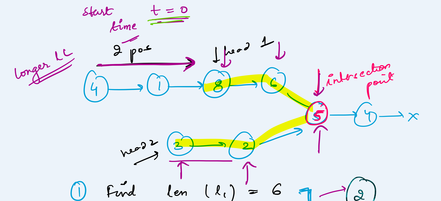
(b)

TC → O(n+m)

SC → O(n) | O(m)



speed (x_1) = speed (x_2)



① Find len (l_1) = 6] → 2

Find len (l_2) = 4]

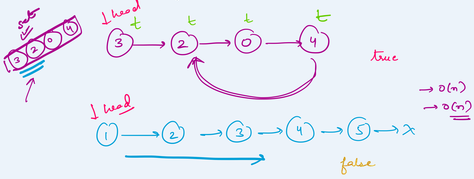
while (head 1 != head 2) {

head 1 = head 1. next ;

head 2 = head 2. next ; } same speed

]

Q) Given a head of LL, determine if there is a cycle or not.



Approach (2): change the structure of node itself.

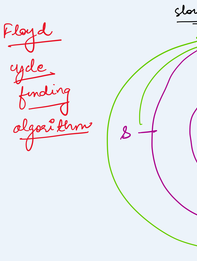
class node {

int data ;

Node next ;

boolean visited

}



(f) Detect the starting point of loop.