

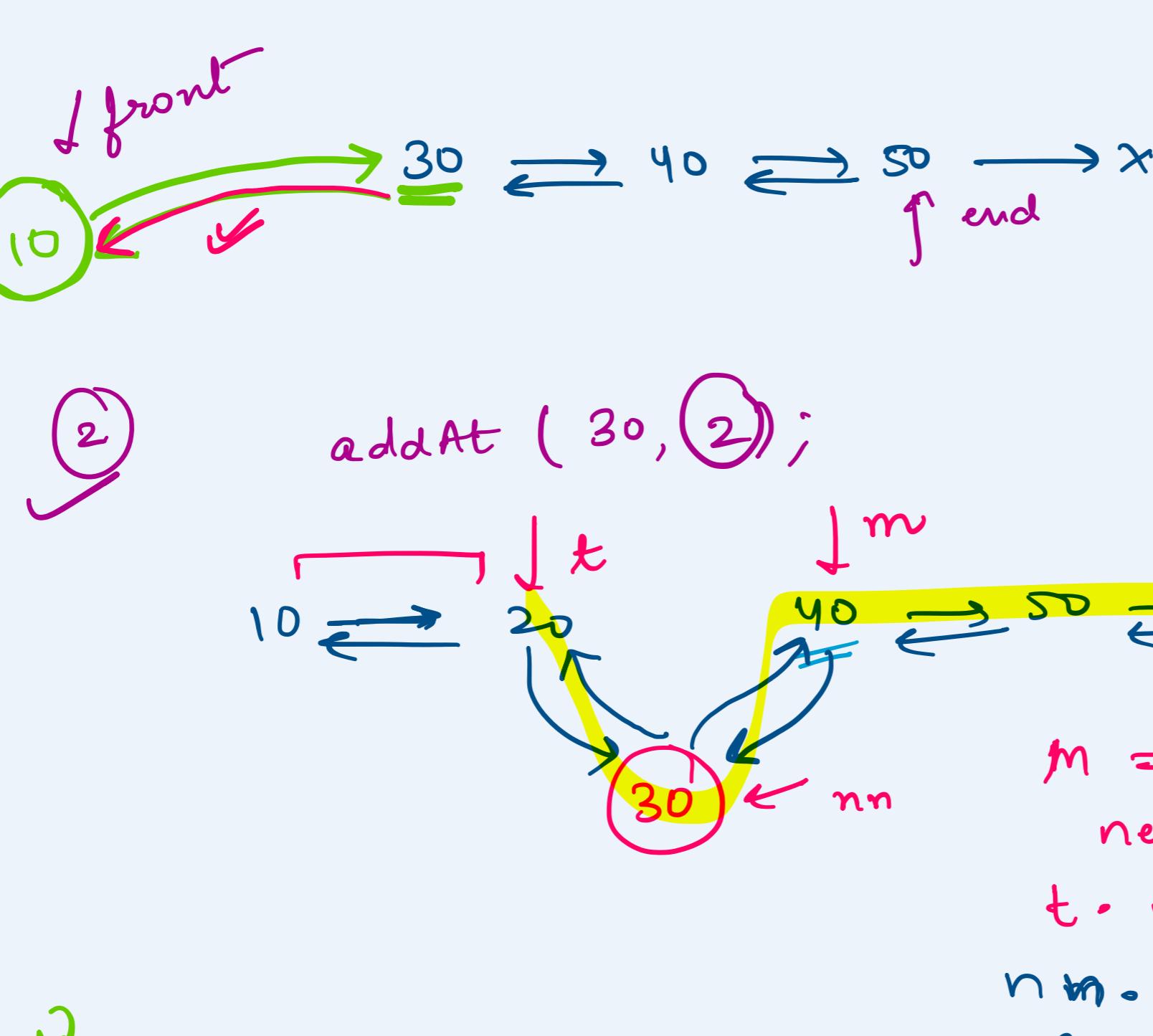
- Node node i
int data;
node next;
node prev;

DL

2

3

3



3) add At end (30);

↓ front
50 \Rightarrow 40 \Rightarrow 20 \Rightarrow 10

30 $\xrightarrow{\text{next}}$ 30

↑ end

(1) new node

(4) end → next = nn

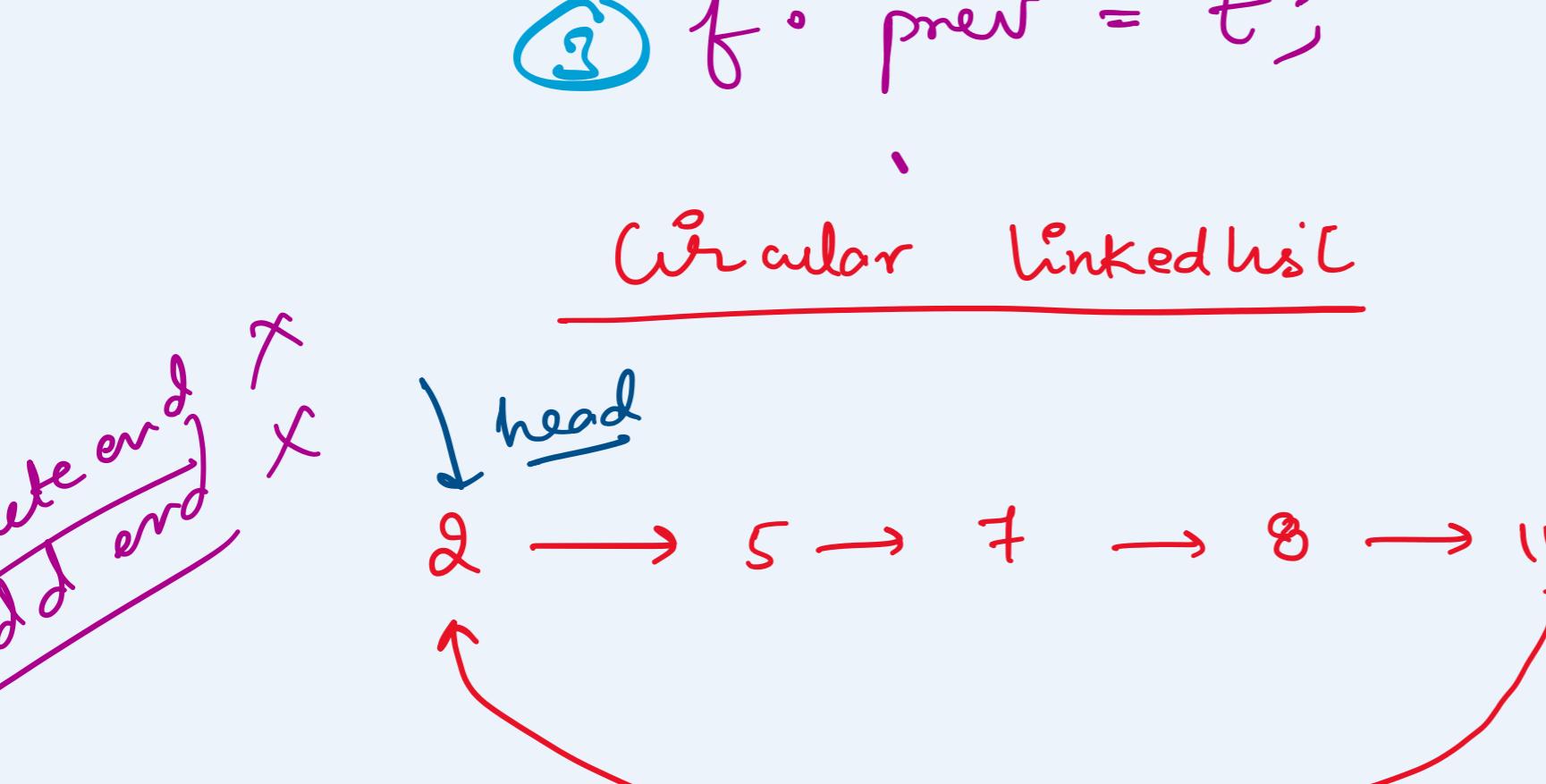
(2) nn → pnew = end ;
end = nn ;

removeAt (3);

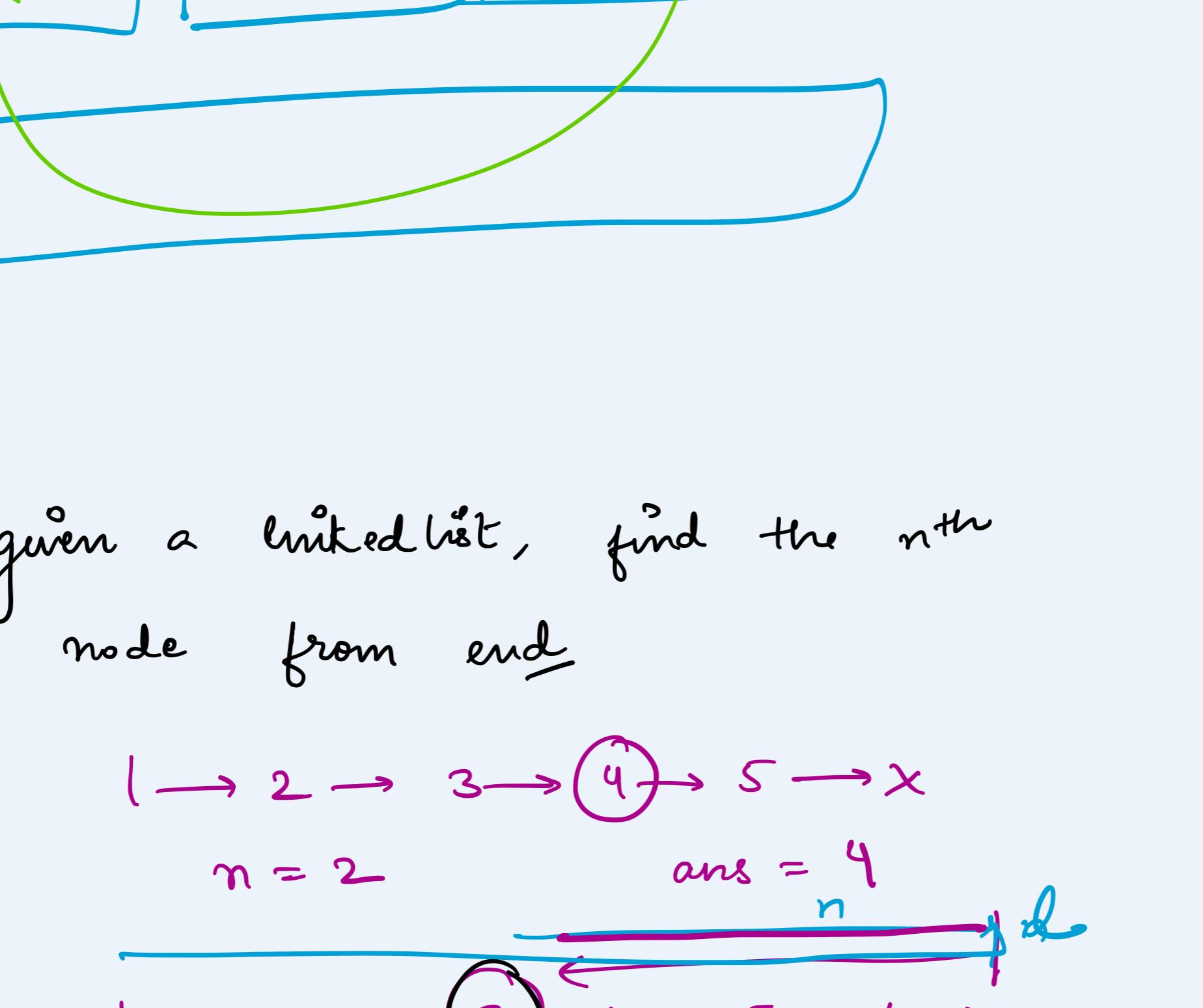
↓ t

↓ t

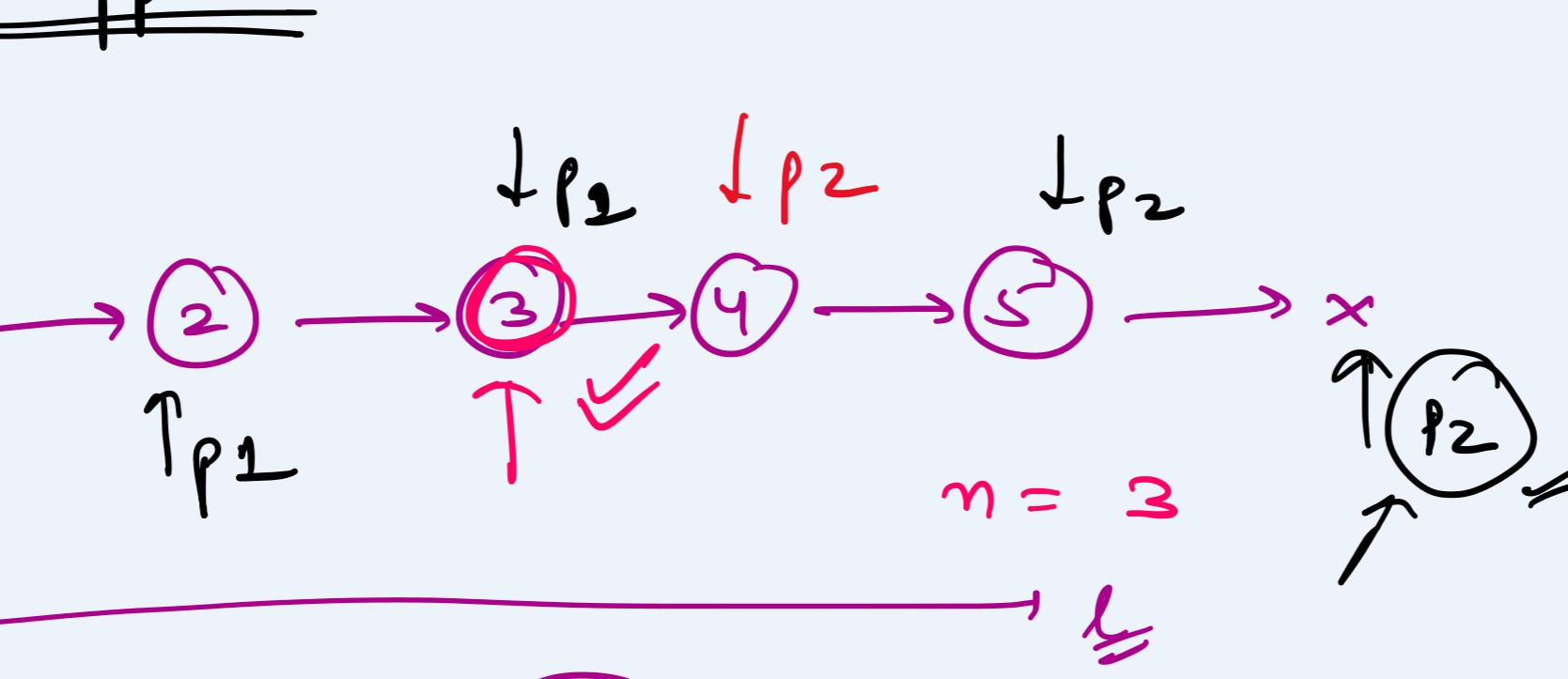
- $$\textcircled{1} \quad \underline{\underline{t \cdot \text{next}}} = \underline{\underline{t \cdot}}$$



- # ① Fibonacci heap



- $O(n)$ \leftarrow find the
 $O(n) + O(n)$

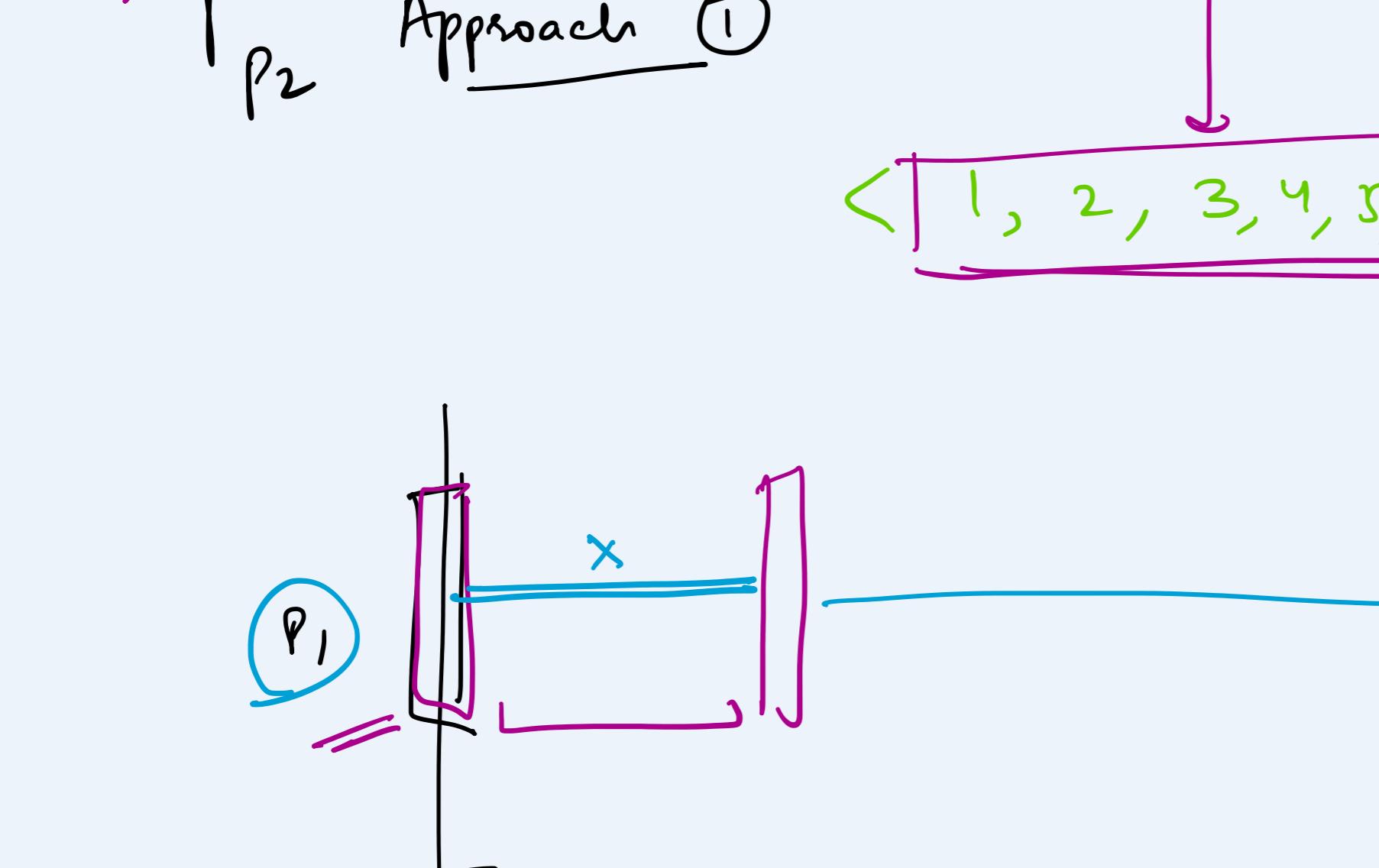


- 3
while ($p_2 \neq \text{null}$) {
 $p_1 = p_1 \cdot \text{next};$
 $p_2 = p_2 \cdot \text{next};$
}

3
return $p_1 \cdot \text{data}$;

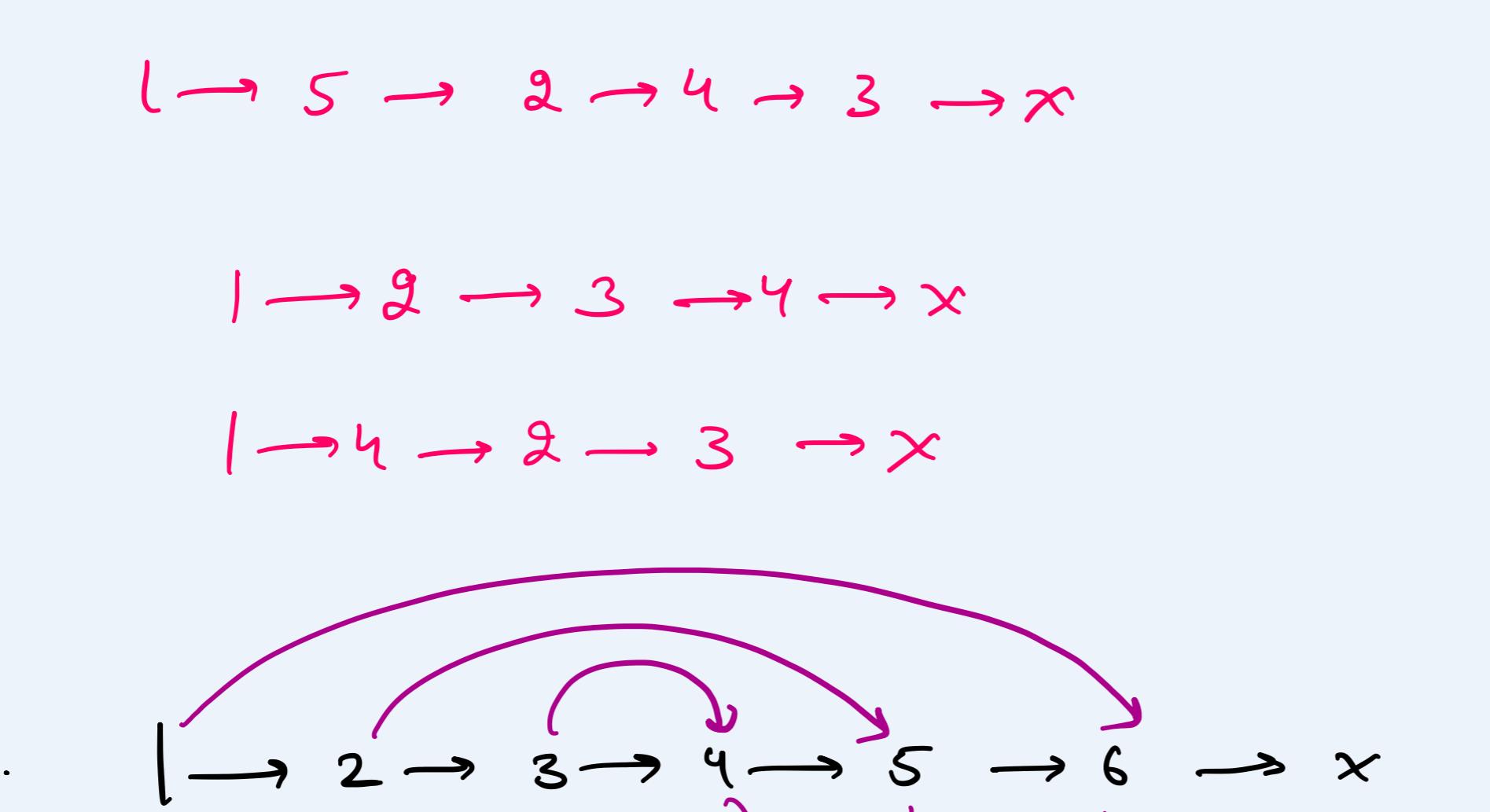
Given two linked lists, find the intersection of LL.

- A hand-drawn diagram illustrating a sequence or flow. It starts with the number '1' on the left, followed by an arrow pointing to the number '2'. Another arrow originates from '2' and points to a circled number '30'. The circled '30' is highlighted with a green marker.



Given a single linked list
need to fold it.

- $\rightarrow l_0 \rightarrow l_1 \rightarrow l_2 \rightarrow \dots \dots l_{n-1}$
 $\hookrightarrow l_0 \rightarrow l_n \rightarrow l_1 \rightarrow l_{n-1} \rightarrow l_2 \rightarrow \dots$
 $1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow x$
 \downarrow



A hand-drawn graph illustrating a function $y = f(x)$. The horizontal axis is labeled x at its right end. Two curves are shown: one opening upwards and one opening downwards, both intersecting at a point. Arrows on both curves point towards the intersection point, indicating the direction of increasing x .

Find mid and break it

→ 2 → 3 → 4 → 5 → 6 → x

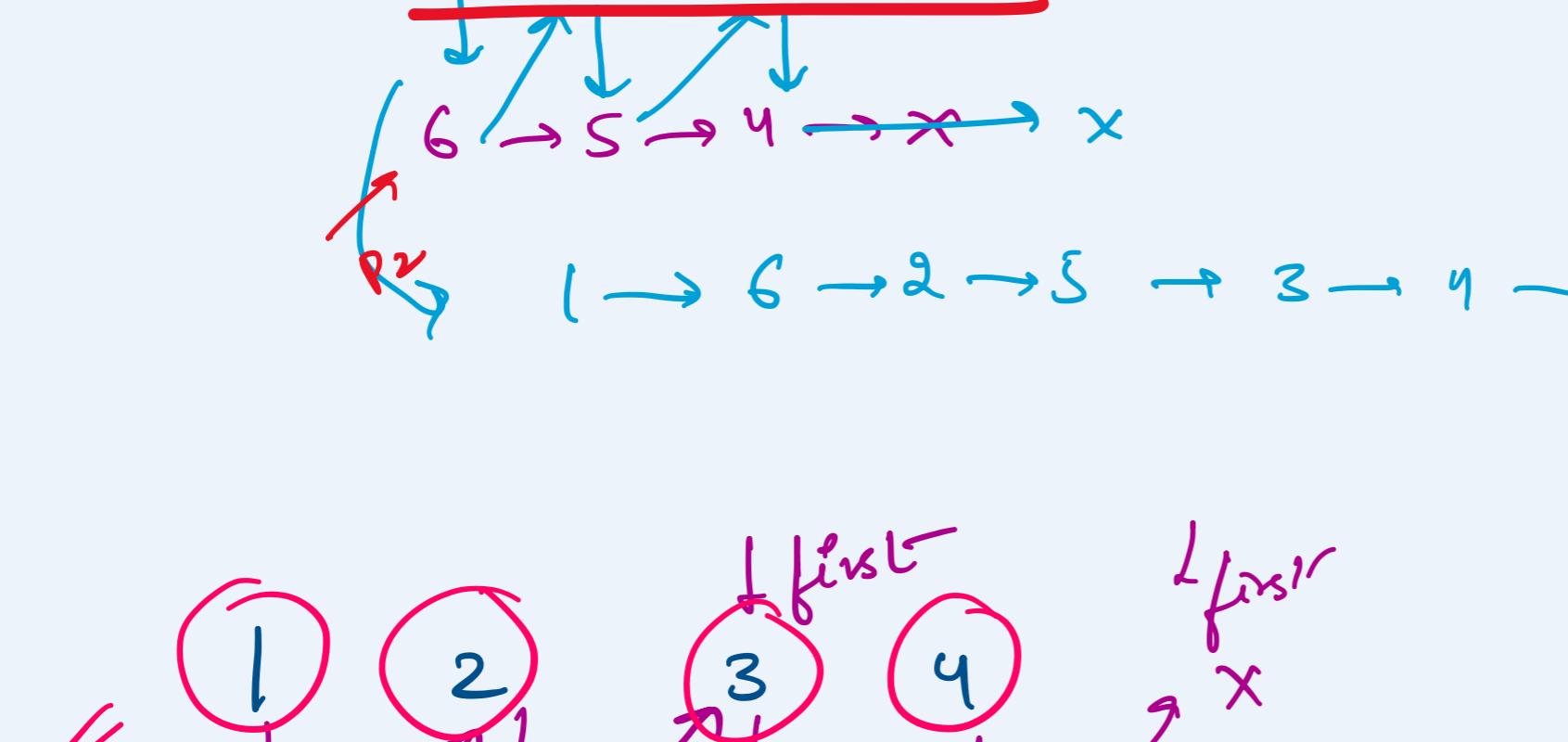
1 → 2 → 3 → x

4 → 5 → 6 → x

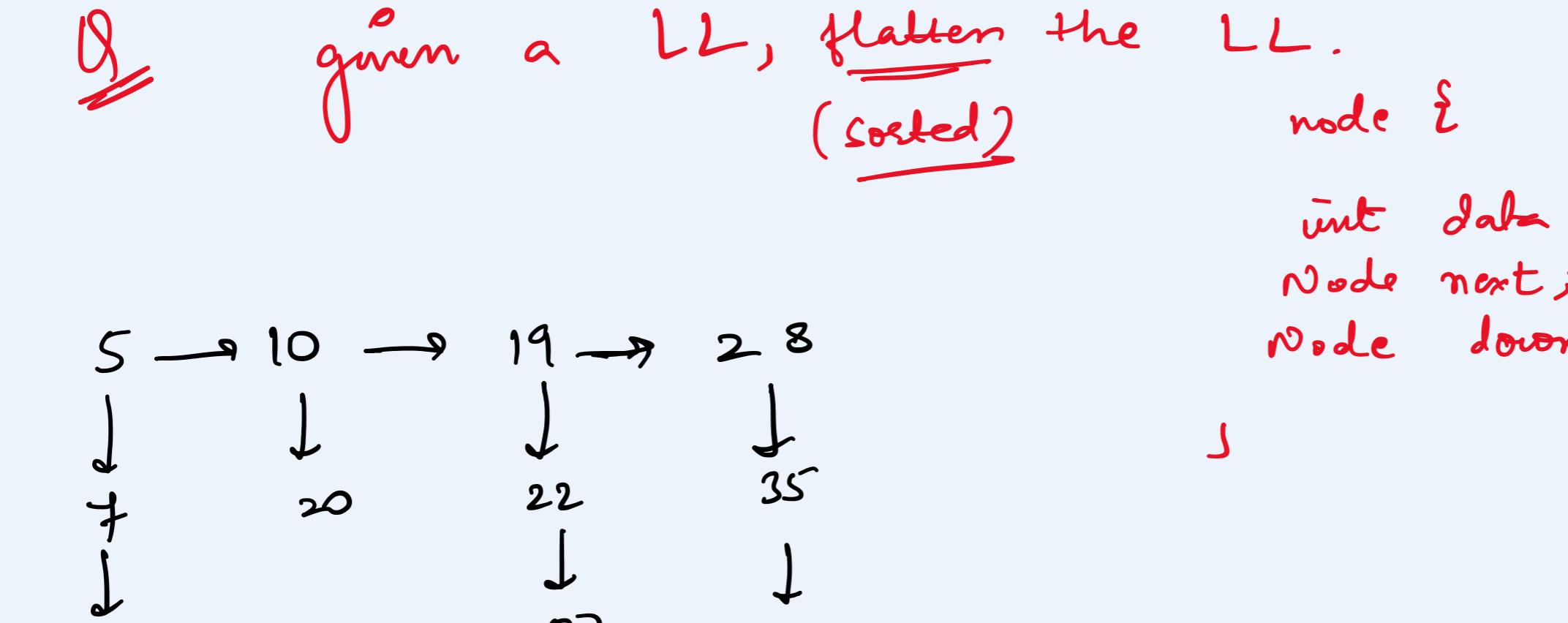
Reverse the s
head | 1 → 2 → 3 → x

d2 | 6 → 5 → 4 → x

Merge the two linked lists



- A hand-drawn diagram of a binary tree. The root node is circled in red and contains the number 8. It has two children: a plus sign (+) and the number 6. The plus sign node also has a child, the number 5. The number 6 has a child, the variable x . All nodes except x are circled in red. Below each node, the word "second" is written in red. To the right of the tree, there is a blue arrow pointing downwards, with the text "l'm" above it and "temp" below it.



8
↓
30

50
↓
75

output \Rightarrow 5 \Rightarrow 7 \Rightarrow 8 \Rightarrow 10 \Rightarrow 19 \Rightarrow 23