Linked list intersect

Ah, you're talking about skipA and skipB from the other approach (the length-difference method). Let me explain super simply.

What is skipA and skipB?

When you have two linked lists of different lengths, you can calculate how many extra nodes are in one list before the intersection.

- skipA = how many nodes List A has before the intersection
- skipB = how many nodes List B has before the intersection

Example

```
less
List A: 4 1 8 4 5
List B: 5 6 1 8 4 5
```

Let's count:

- List A length = 5
- List B length = 6
- Common part (after intersection at 8) = 3 nodes (8 4 5)

So:

- skipA = 5 3 = 2 nodes (4 1)
- skipB = 6 3 = 3 nodes (5 6 1)

So before the intersection,

- List A has 2 extra nodes
- List B has 3 extra nodes

How do we use skipA and skipB?

- 1. Find lengths IenA and IenB
- **2.** Calculate difference d = |IenA IenB|
- **3.** Move the longer list pointer ahead by d steps

- If List B is longer by 1, move pB 1 step forward first
- **4.** Then move both pointers together until they meet

Applying to this example

- lenA = 5
- lenB = 6
- difference = 1

So move pB 1 step ahead first (skip 5 in List B).

Now both have equal remaining length →

```
nginx

pA 4
pB 6
```

Move step by step \rightarrow they will meet at 8.

TL;DR

- skipA = number of extra nodes in List A before intersection
- skipB = number of extra nodes in List B before intersection
- Helps us align both lists to the same remaining length before walking together.

Would you like me to:

- ☑ Draw a simple diagram showing skipA/skipB visually?
- Or explain again using a short story?