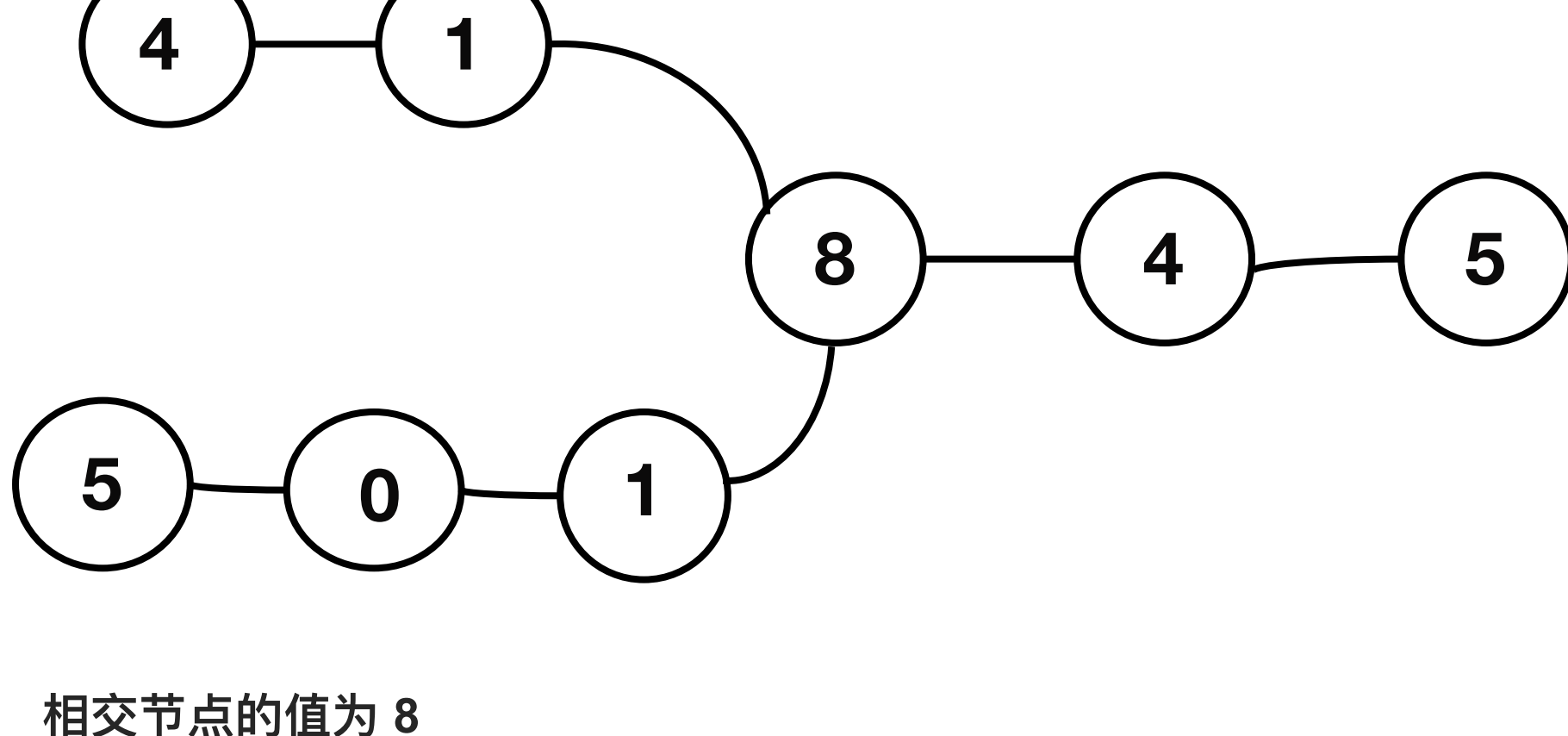


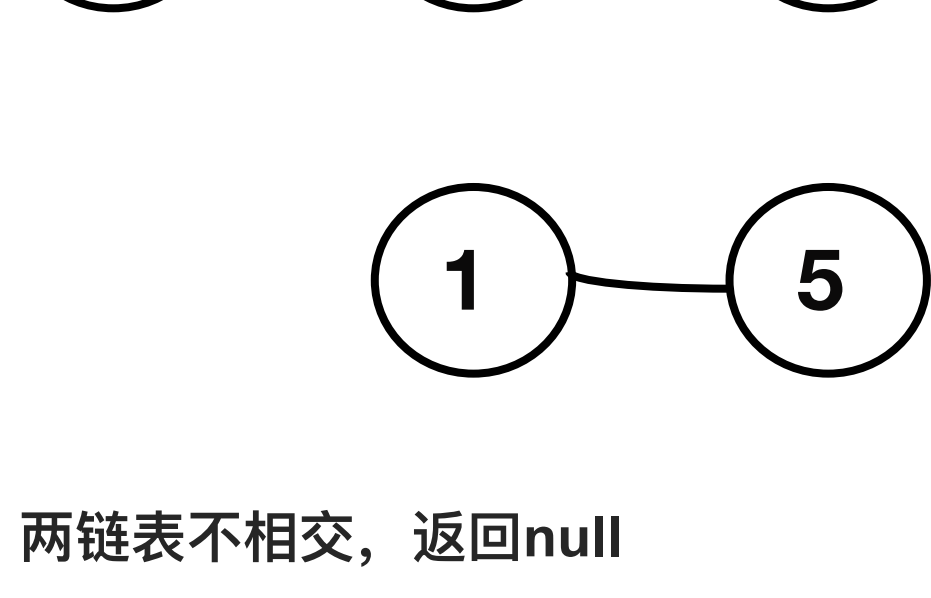
# 相交链表

编写一个程序，找到两个单链表相交的起始节点。

如下面的两个链表：

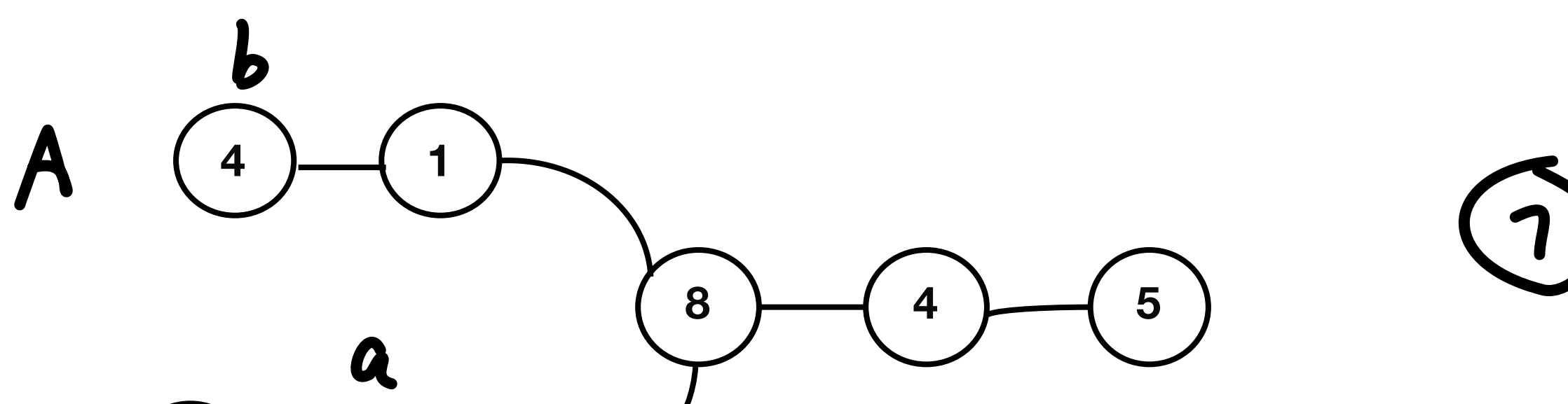
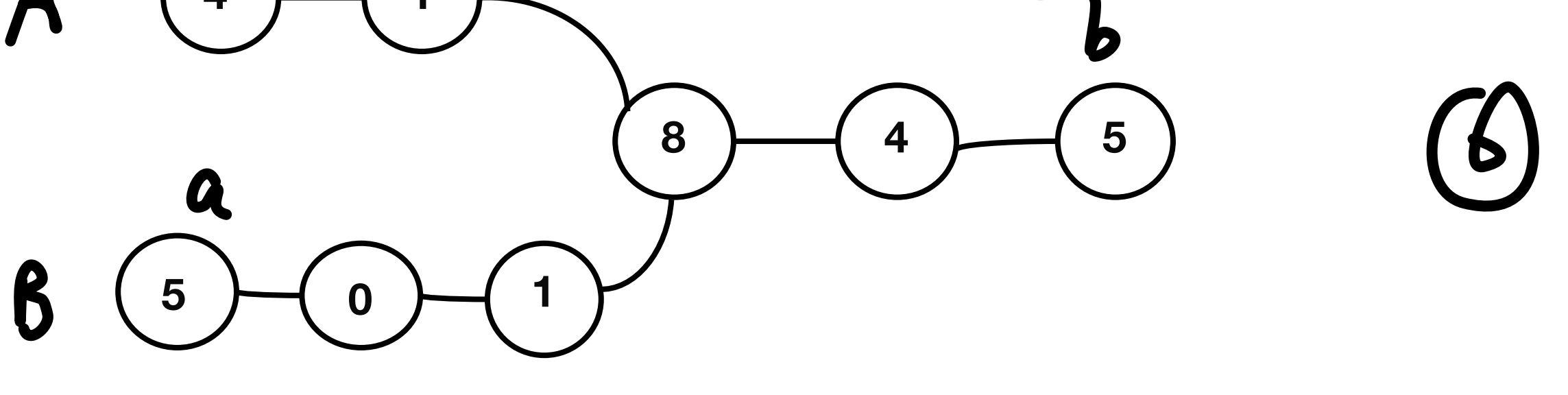
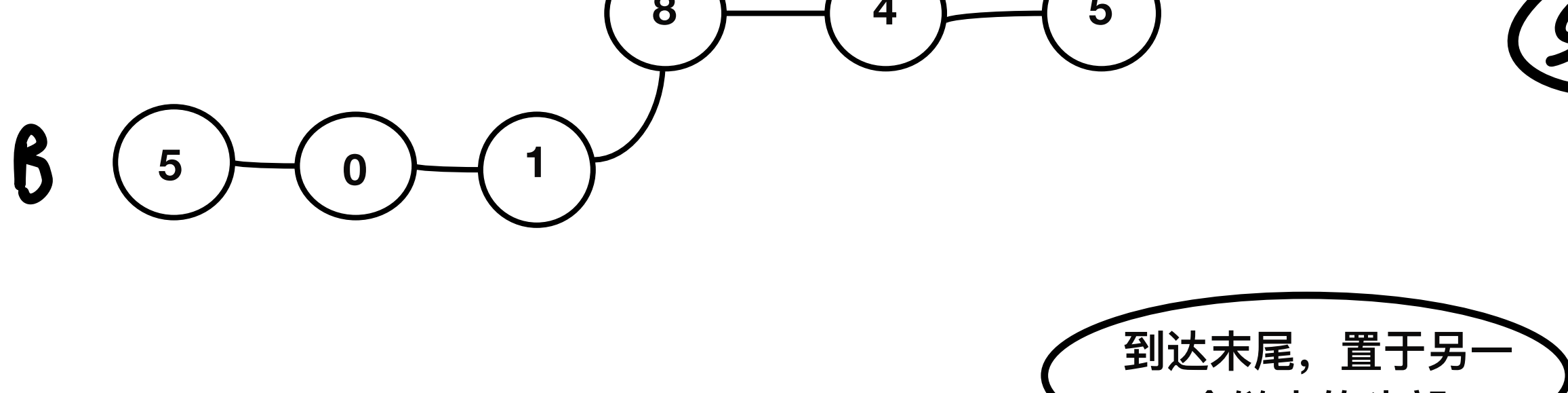
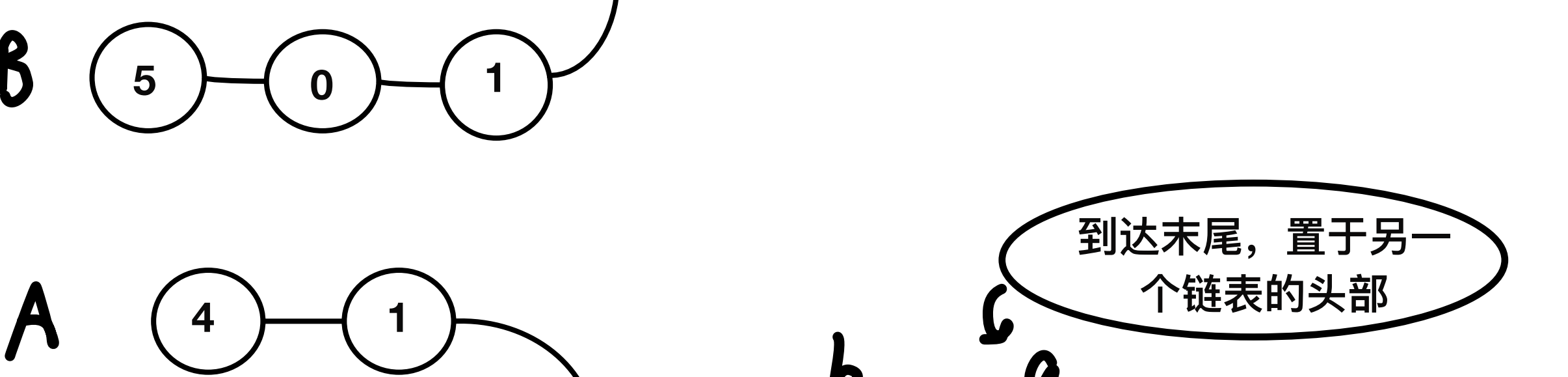
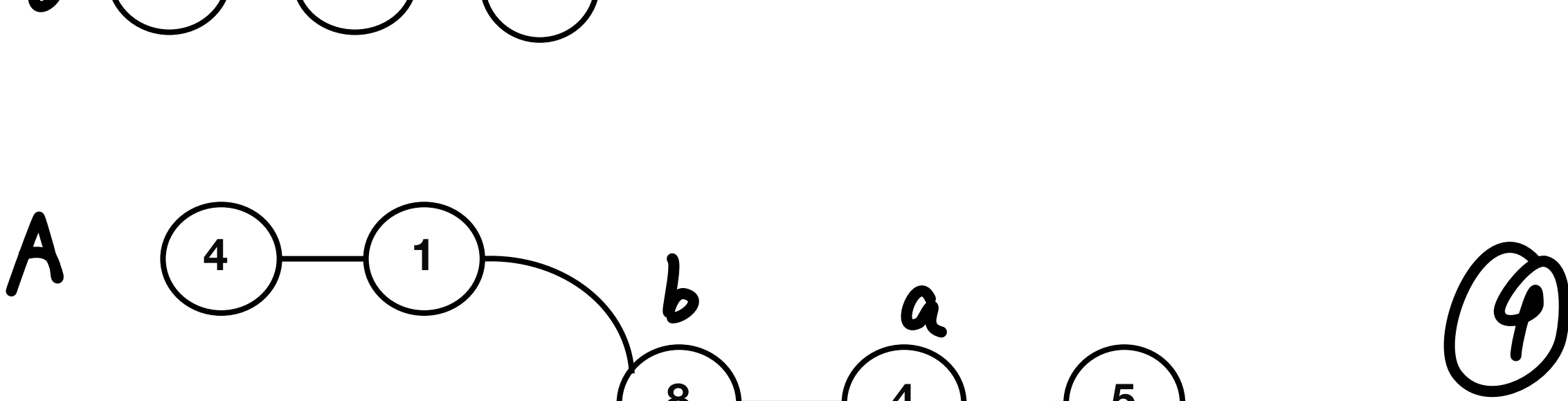
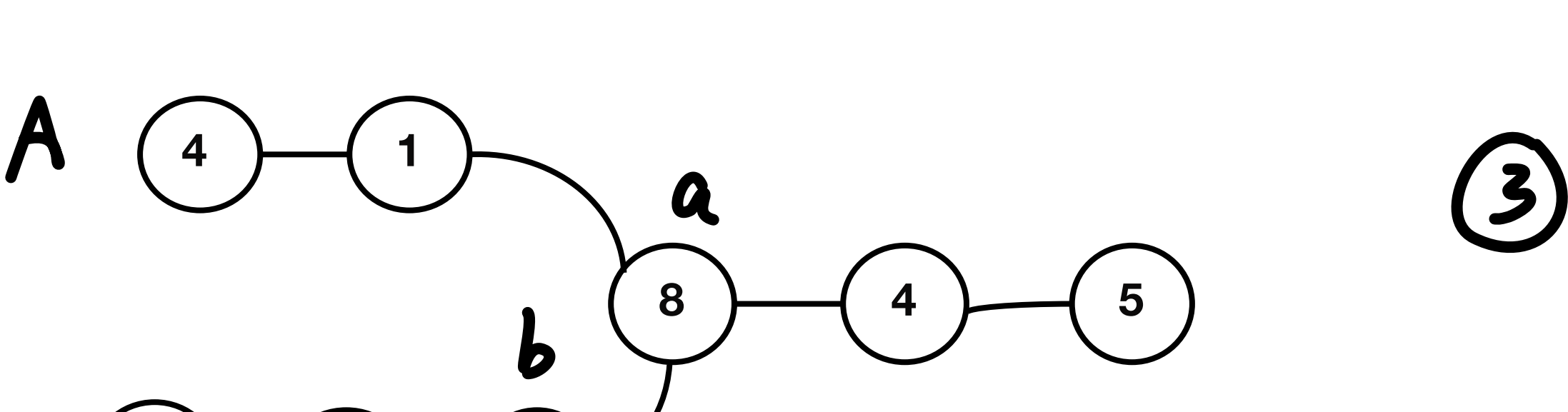
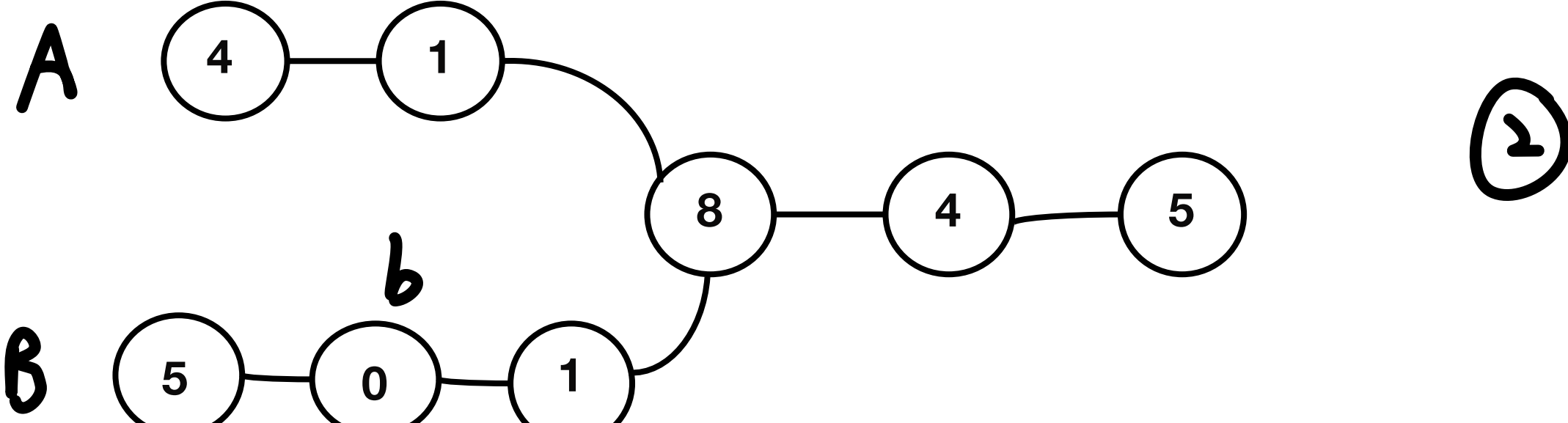
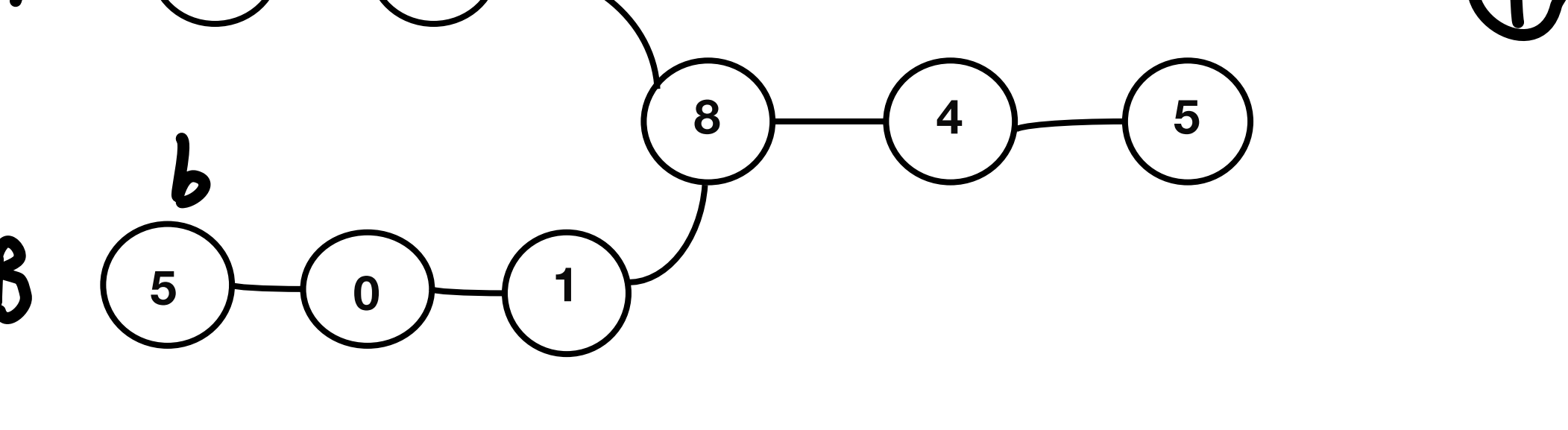


相交节点的值为 8



两链表不相交，返回null

双指针，分别指向两个链表的表头，并且同时移动，当移动到尾部时，置于另一个链表的表头，直到二者相遇



额外内容：为什么 节点前进的条件 不能为

```
if a.next != nil {
    a = a.Next
}else {
    a = headB
}
```

注：循环条件为

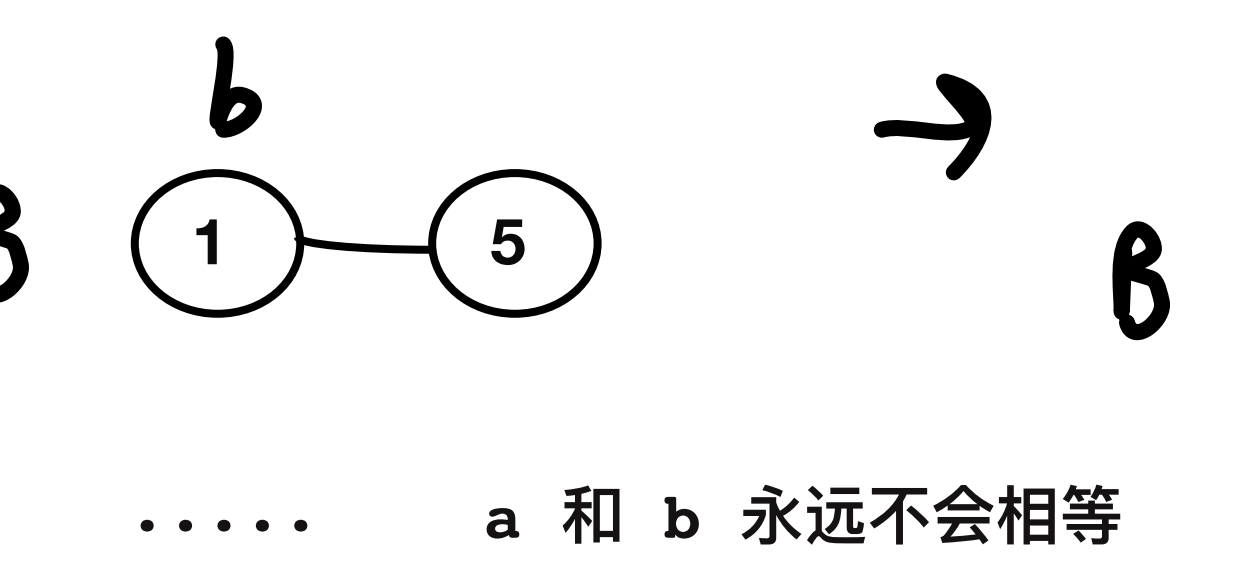
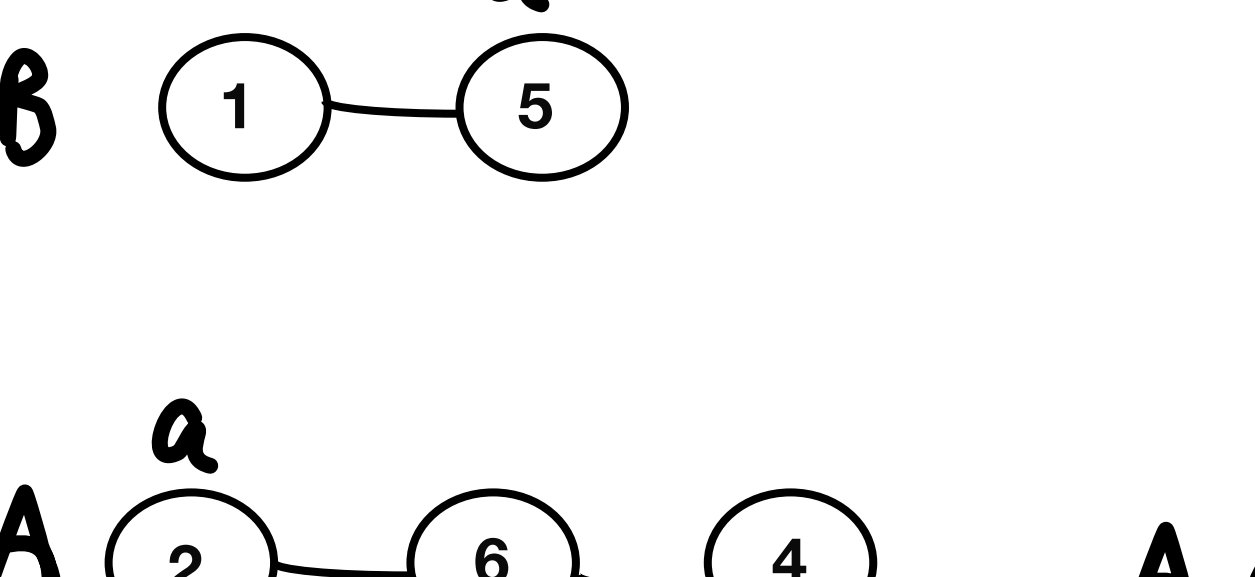
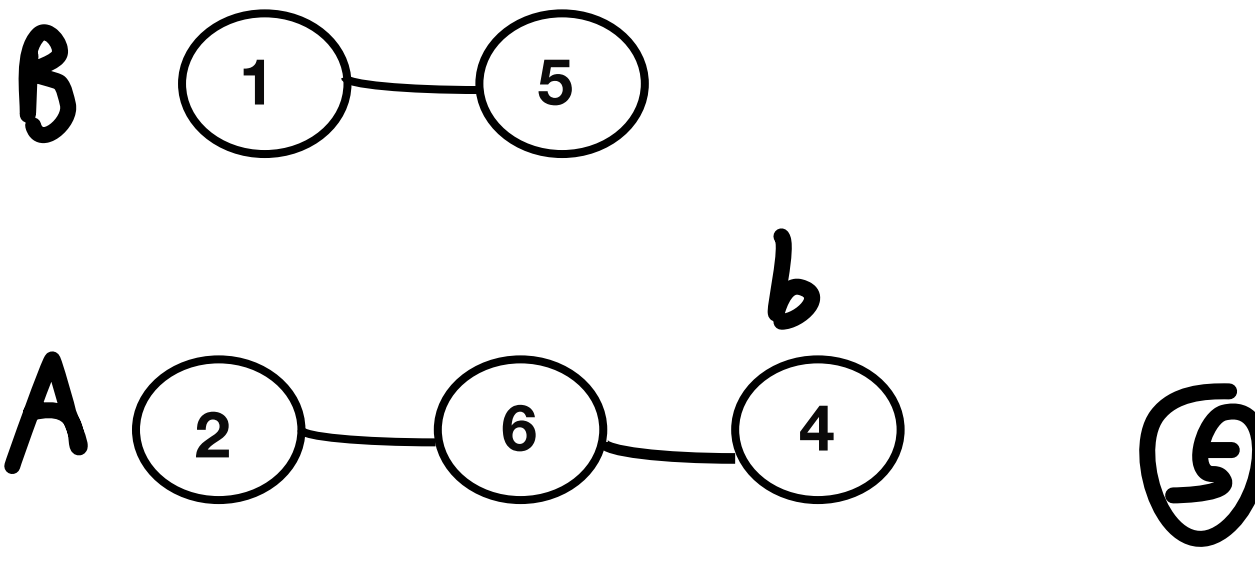
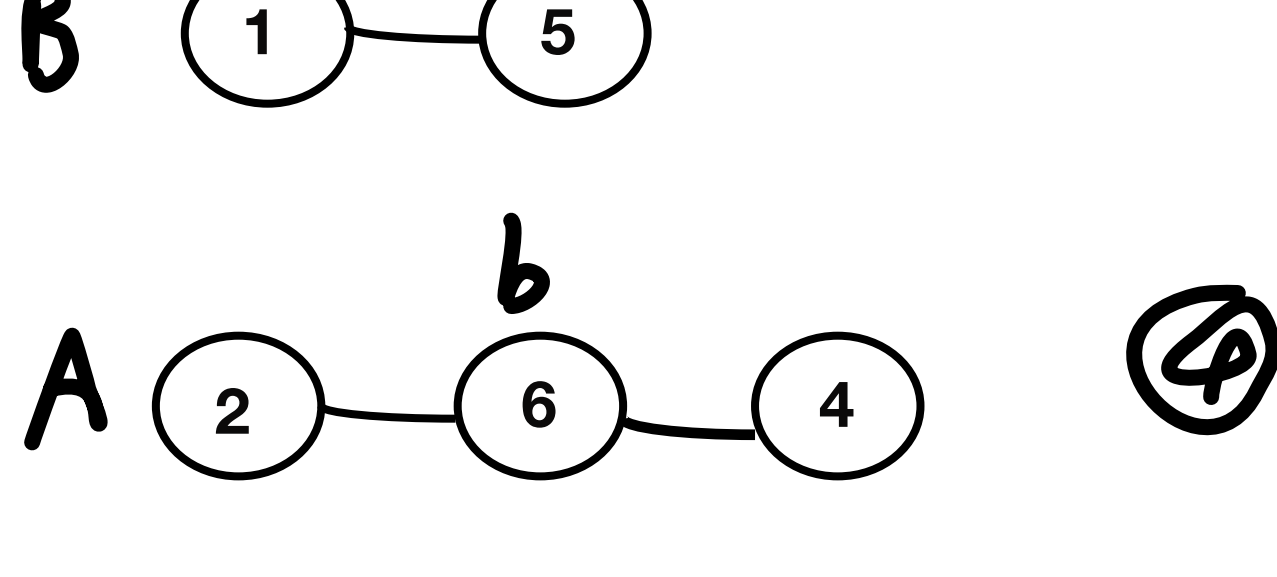
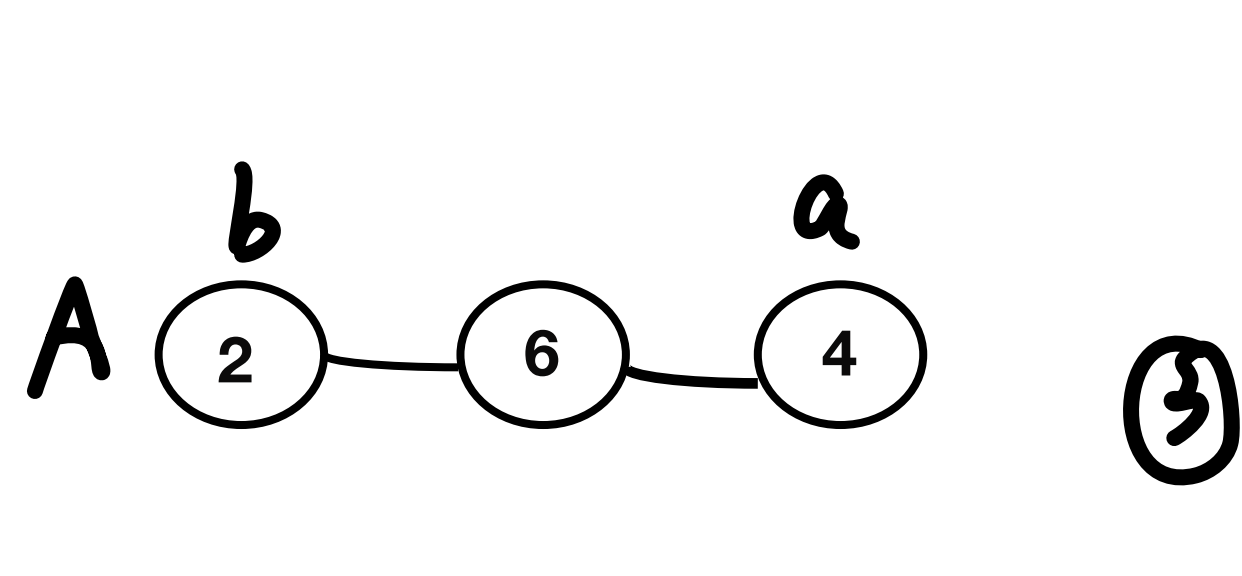
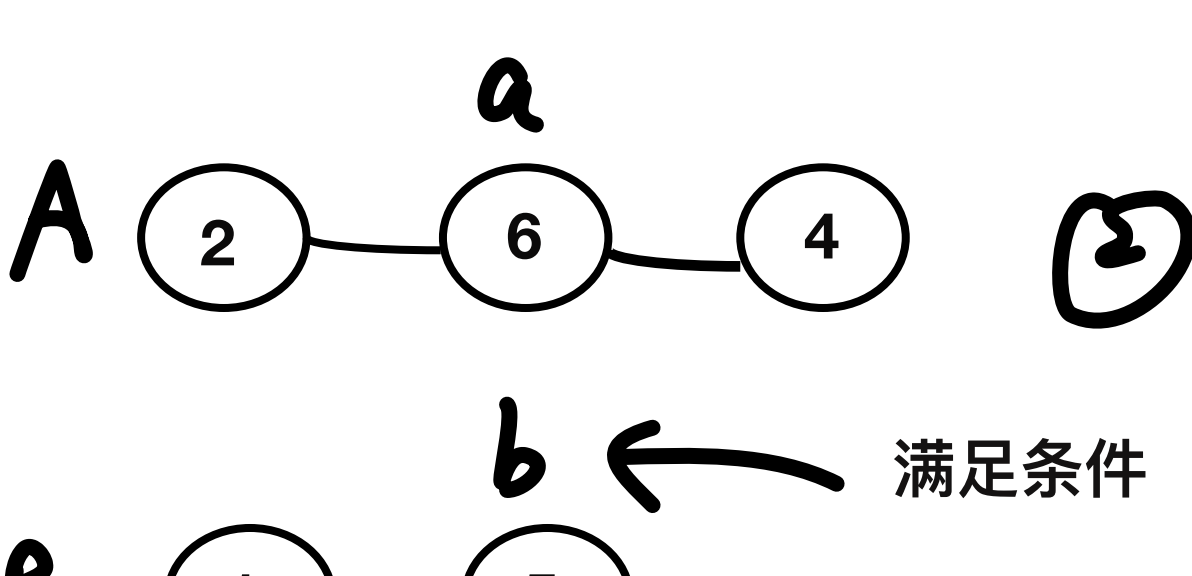
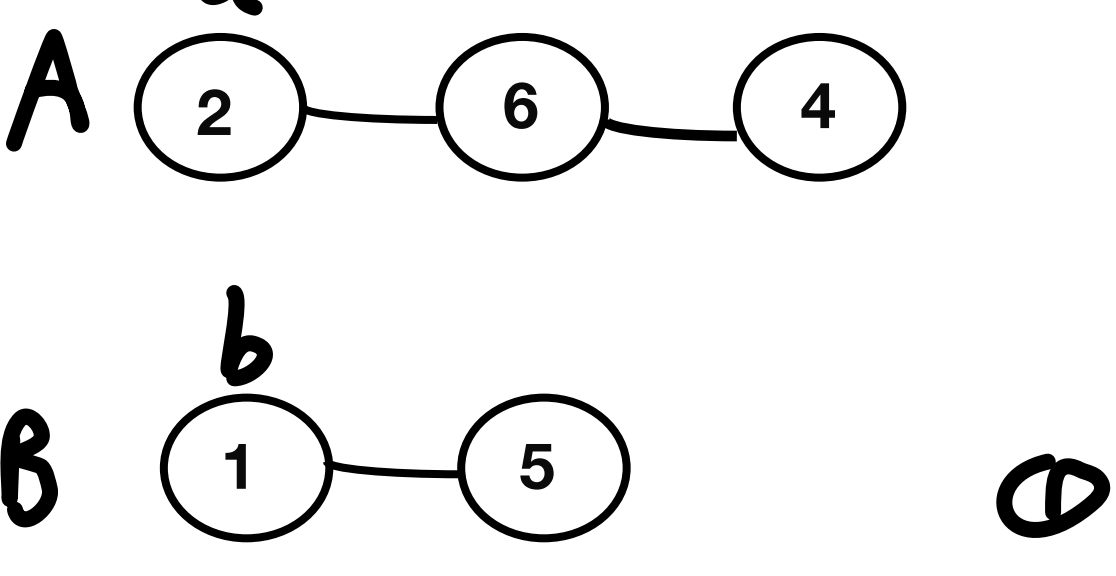
```
while a != b {}
```

而必须为

```
if a != nil {
    a = a.Next
}else {
    a = headB
}
```

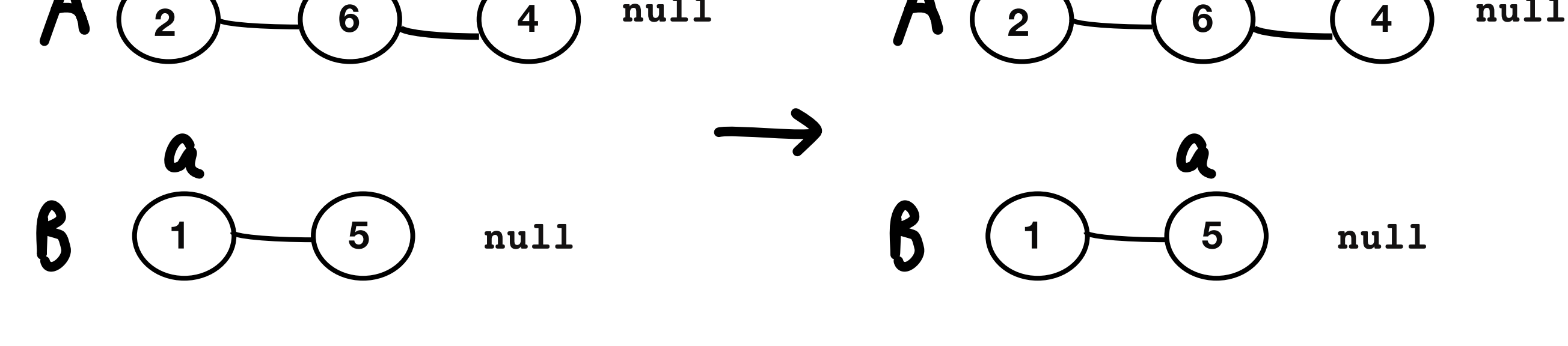
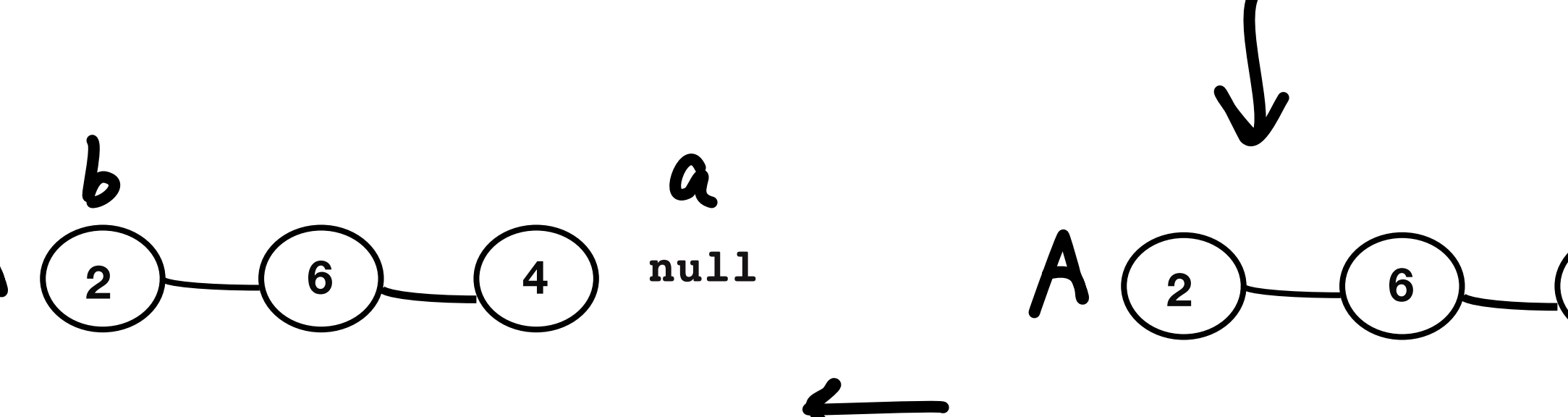
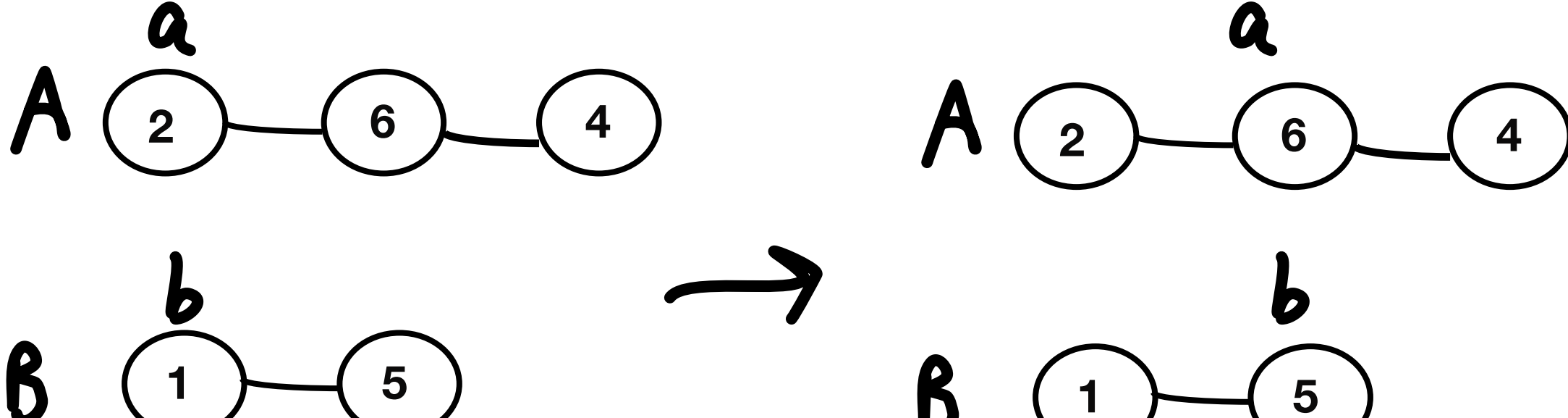
如果条件为 `a.next != nil`

节点到达尾部都会直接移动到另一个节点的头部，这样永远都无法满足循环条件 `while a != b {}`



..... a 和 b 永远不会相等

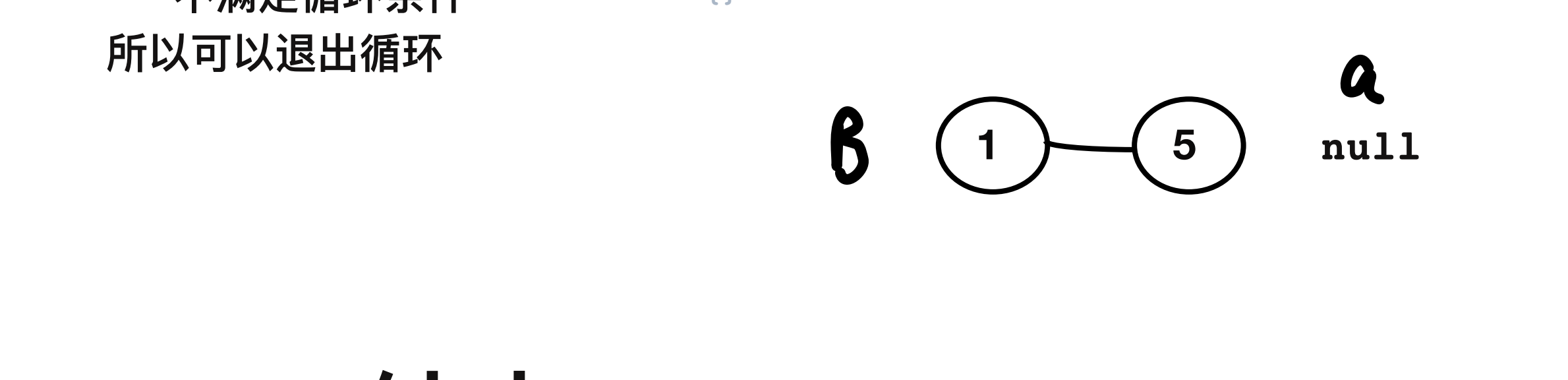
但当条件为 `a != nil` 时



此时 `a = b = null`

不满足循环条件 `while a != b {}`

所以可以退出循环



结束