
1. AddTwoNumbers

2. Merge k Sorted Lists

3. Reverse LinkedLists

문제 1) AddTwoNumbers

Problem

You are given two non-empty linked lists representing two non-negative integers. The digits are stored in reverse order and each of their nodes contain a single digit. Add the two numbers and return it as a linked list.

You may assume the two numbers do not contain any leading zero, except the number 0 itself.

Example:

Input: (2 -> 4 -> 3) + (5 -> 6 -> 4)

Output: 7 -> 0 -> 8

Explanation: $342 + 465 = 807$.

AddTwoNumbers

Problem

Input:

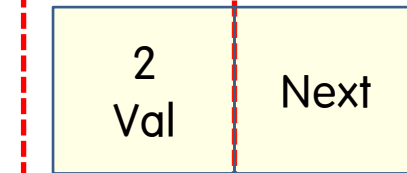
2→4→3,

5→6→8

7 0 6

Output: 706 7021

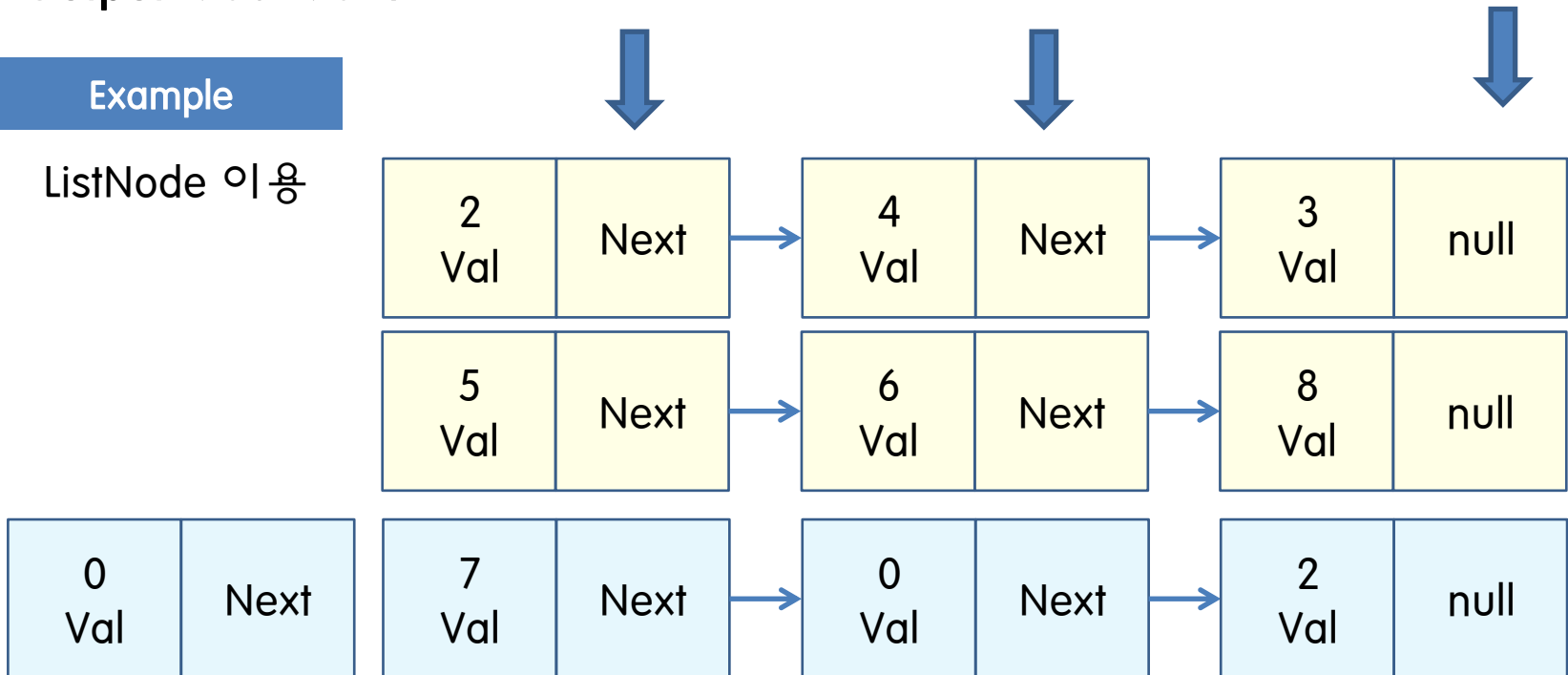
ListNode



ListNode

Example

ListNode 이용



Solution

LinkedList

1. 문제를 정확히 이해
2. 알고리즘 정하고 답을 그릇 정한다
3. for 문 돌리기
4. 생각->프로그램(한국말로 생각하고->Java)
결과를 해석하여 이미지화시킨다

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Input:

2->4->3,

5->6->2

7 0 6

Output: 706

1. ListNode 정확히 이해

문제 2) Merge k Sorted Lists

Problem

Merge k sorted linked lists and return it as one sorted list. Analyze and describe its complexity.

Example:

Input:

```
[  
  1->4->5,  
  1->3->4,  
  2->6  
]
```

Output: 1->1->2->3->4->4->5->6

Merge k Sorted Lists

Problem

Input:

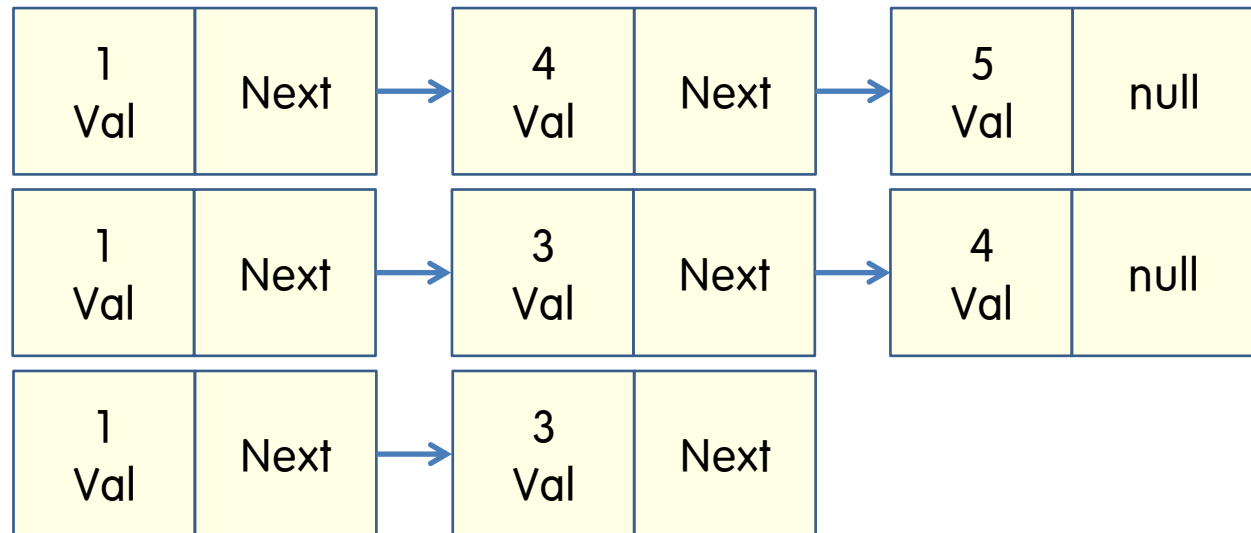
1-→4-→5,

1-→3-→4,

2-→6

Output: 1-→1-→2-→3-→4-→4-→5-→6

Example



Solution

BFS

1. 문제를 정확히 이해
2. 알고리즘 정하고 답을 그릇 정한다
3. for 문 돌리기
4. 생각->프로그램(한국말로 생각하고->Java)
결과를 해석하여 이미지화시킨다

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문제 3) Reverse LinkedLists

Problem

Reverse a singly linked list.

Example:

Input: 1->2->3->4->5->NULL

Output: 5->4->3->2->1->NULL

Follow up:

A linked list can be reversed either iteratively or recursively. Could you implement both?

Reverse LinkedLists

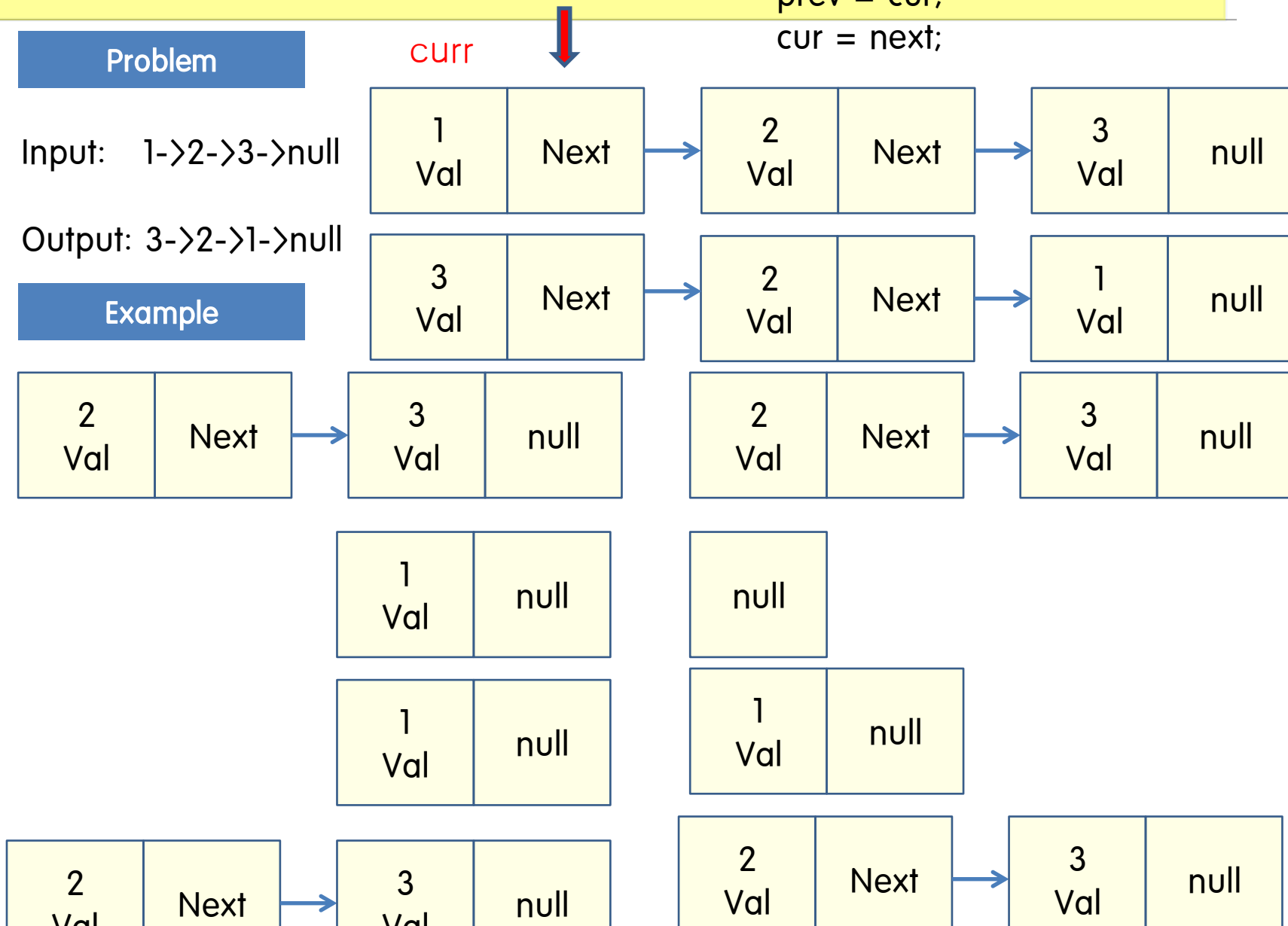
```
next = cur.next;  
cur.next = prev;  
prev = cur;  
cur = next;
```

Problem

Input: 1->2->3->null

Output: 3->2->1->null

Example



Reverse LinkedLists

```
next = cur.next;  
cur.next = prev;  
prev = cur;  
cur = next;
```

curr

