1. Given two numbers represented by two lists, write a function that returns sum list. The sum list is list representation of addition of two input numbers.

Example 1

Input:

First List: 5->6->3 // represents number 365

Second List: 8->4->2 // represents number 248

Output

Resultant list: 3->1->6 // represents number 613

Example 2

Input:

First List: 7->5->9->4->6 // represents number 64957

Second List: 8->4 // represents number 48

Output

Resultant list: 5->0->0->5->6 // represents number 65005

# 2. Given an array, reverse every sub-array formed by consecutive k elements.

Examples:

**Input:**

list = [1, 2, 3, 4, 5, 6, 7, 8, 9]

k = 3

**Output:**

[3, 2, 1, 6, 5, 4, 9, 8, 7]

**Input:**

list = [1, 2, 3, 4, 5, 6, 7, 8]

k = 5

**Output:**

[5, 4, 3, 2, 1, 8, 7, 6]

**Input:**

list = [1, 2, 3, 4, 5, 6]

k = 1

**Output:**

[1, 2, 3, 4, 5, 6]

**Input:**

list = [1, 2, 3, 4, 5, 6, 7, 8]

k = 10

**Output:**

[8, 7, 6, 5, 4, 3, 2, 1]

3. Given two sorted lists, find their union and intersection.

For example, if the input arrays are:   
list1 = {1, 3, 4, 5, 7}  
list2 = {2, 3, 5, 6}  
Then the program should print Union as {1, 2, 3, 4, 5, 6, 7} and Intersection as {3, 5}

4. Write a method to check whether two singly linked lists have the same contents.

5. Write a method to reverse a singly linked list using only one pass through the list.

6. Attach a singly linked list to the end of another singly linked list.

7. Put numbers in a singly linked list in ascending order. Use this operation to find the median in the list of numbers.

- Sort

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8. Insert a node exactly in the middle of a singly linked list.

9. Insert a node into any position in a singly linked list.

10. Remove a node at any position in a singly linked list