



# Introduction to Basic Data Structures

## **Module 7.5: Practice Day 02** (Practice Questions)

### **Topics:**

1. Singly Linked List

## Practice Problem 1

**Question:** Take two singly linked lists as input and check if their sizes are same or not.

Sample Input	Sample Output
2 1 5 3 4 9 -1 1 2 3 4 5 6 -1	YES
5 1 4 5 -1 5 1 4 -1	NO

## Practice Problem 2

**Question:** Take a singly linked list as input and print the reverse of the linked list.

Sample Input	Sample Output
5 4 8 6 2 1 -1	1 2 6 8 4 5
1 2 3 4 -1	4 3 2 1

## Practice Problem 3

**Question:** Take a singly linked list as input and print the middle element. If there are multiple values in the middle print both.

Sample Input	Sample Output
2 4 6 8 10 -1	6
1 2 3 4 5 6 -1	3 4

## Practice Problem 4

**Question:** Take a singly linked list as input, then print the maximum value of them.

Sample Input	Sample Output
2 4 1 3 5 4 2 5 -1	5
5 4 1 2 5 6 8 4 1 3 -1	8

## Practice Problem 5

**Question:** Take a singly linked list as input and sort it in descending order. Then print the list.

Sample Input	Sample Output
1 4 5 2 7 -1	7 5 4 2 1
20 40 30 10 50 60 -1	60 50 40 30 20 10