



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 |