

### Activity 1

You have a linked list of student records, where each record contains the student's name (a string) and their score (an integer). Write a C program to find the student with the highest score in the linked list and print their name.

### Activity 2

You have a linked list of integers. Write a C program to remove all duplicate elements from the list, so that each element appears only once.

### Activity 3

You are given a linked list of integers. Write a C program to find the middle element of the linked list. If the list has an even number of elements, consider the second middle element as the result.

### Activity 4

Write a C program to split a linked list into two separate lists, with the first list containing odd elements and the second list containing even elements.

### Activity 5

#### **Student Enrollment System**

Description: You are tasked with creating a simple student enrollment system using a linear linked list in C programming. The system should allow the user to add new students to the list, display the list of enrolled students, and search for a student by their roll number.

#### **Example Output:**

Student Enrollment System

1. Add a new student
2. Display enrolled students
3. Search for a student by roll number
4. Exit

Enter your choice: 1  
Enter Roll Number: 101  
Enter Name: John Doe  
Enter Age: 20  
Enter GPA: 3.7

Student added successfully!

Enter your choice: 1  
Enter Roll Number: 102

## Linear Linked List – Hands-on Activity

Enter Name: Jane Smith

Enter Age: 19

Enter GPA: 4.0

Student added successfully!

Enter your choice: 2

Enrolled Students:

Roll Number: 101 | Name: John Doe | Age: 20 | GPA: 3.7

Roll Number: 102 | Name: Jane Smith | Age: 19 | GPA: 4.0

Enter your choice: 3

Enter Roll Number to search: 102

Student Found:

Roll Number: 102 | Name: Jane Smith | Age: 19 | GPA: 4.0

Enter your choice: 3

Enter Roll Number to search: 103

Student not found.

Enter your choice: 4

Thank you for using the Student Enrollment System!