

Part1: Linked List - Task Management System

Problem: Create a simple task management system using a singly linked list. Each task has a unique identifier, a description, a priority level (1-5), and a status ("Pending", "In Progress" or "Completed").

Requirements:

1. **Task Insertion:** Implement a function to add a new task to the list. Tasks should be added in order of priority (higher priority tasks come first).
2. **Task Deletion:** Implement a function to delete a task by its identifier.
3. **Update Status:** Implement a function to update the status of a task by its identifier.
4. **Display Tasks:** Implement a function to display all tasks, grouped by their current status (i.e., "Pending" tasks first, followed by "In Progress" and then "Completed").
5. **Search by Priority:** Implement a function to search and display all tasks with a specific priority level.

Guidelines:

- Use a singly linked list where each node represents a task.
- Each node should contain the task's unique ID, description, priority, and status.

Note:

The students must form groups of three and ensure they remain in the same group.