

Lab Evaluation 02**Data Structure and Algorithm lab****Program Title: Project ID Maintenance System****Scenario:**

The Department of Computer Science maintains a dynamic list of active project IDs assigned to students for their final-year research projects. These project IDs are stored using a singly linked list, as the number of projects may frequently change throughout the semester. Sometimes, projects get cancelled, merged, or reassigned, so the department needs a program that can delete a project ID from the list based on its position.

Task: Write a program that performs the following operations using python**Instructions: (10 Marks)**

1. Accepts the number of currently assigned project IDs.
2. Accepts each project ID from the user and stores them in a singly linked list.
3. Accepts the position (1-based index) of the project ID that needs to be removed.
4. Deletes the project ID at the specified position from the list.
5. Displays the updated list of project IDs after deletion.

Sample Input

Enter the number of active project IDs: 5
Enter project ID 1: P101
Enter project ID 2: P205
Enter project ID 3: P309
Enter project ID 4: P412
Enter project ID 5: P518
Enter the position of the project ID to delete: 3

Sample Output

Updated list of project IDs:
P101 -> P205 -> P412 -> P518