# Rajalakshmi Engineering College

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Branch: REC

Department: I ECE FB

Batch: 2028

Degree: B.E - ECE



## NeoColab\_REC\_CS23231\_DATA STRUCTURES

REC\_DS using C\_Week 1\_COD\_Question 6

Attempt : 1 Total Mark : 10 Marks Obtained : 10

Section 1: Coding

#### 1. Problem Statement

John is tasked with creating a program to manage student roll numbers using a singly linked list.

Write a program for John that accepts students' roll numbers, inserts them at the end of the linked list, and displays the numbers.

## **Input Format**

The first line of input consists of an integer N, representing the number of students.

The second line consists of N space-separated integers, representing the roll numbers of students.

### **Output Format**

The output prints the space-separated integers singly linked list, after inserting the roll numbers of students at the end.

Refer to the sample output for formatting specifications.

#### Sample Test Case

```
Input: 5
23 85 47 62 31
Output: 23 85 47 62 31
Answer
#include<stdio.h>
#include<stdlib.h>
typedef struct student{
  int roll:
  struct student* next;
}node;
node* newnode(int rollno){
  node* data=(node*)malloc(sizeof(node));
  data->roll=rollno;
  data->next=NULL;
  return data;
void traverse(node* head){
  while(head!=NULL){
    printf("%d ",head->roll);
    head=head->next;
  }
}
int main(){
  int n,rollno;
  scanf("%d",&n);
  scanf("%d",&rollno);
node* head=newnode(rollno);
  node*temp=head;
```

```
while(--n){
scanf("
ter
                                                2116240801141
                                                                        2176240801747
           scanf("%d",&rollno);
           temp->next=newnode(rollno);
           temp=temp->next;
         traverse(head);
       }
                                                                   Marks: 10/10
       Status: Correct
2176240801747
                        2116240801141
                                                2116240801141
                                                                        2176240801747
2116240801141
                                                                        2116240801141
                                                2116240801141
                        2116240801141
```