## Rajalakshmi Engineering College

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Branch: REC

Department: I CSE FE

Batch: 2028

Degree: B.E - CSE



## 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>
   struct Node{
     int data:
     struct Node* next;
   struct Node* createnode(int data){
     struct Node* newnode=(struct Node*)malloc(sizeof(struct Node));
     newnode->data=data:
     newnode->next=NULL;
     return newnode;
  void insertnode(struct Node** head,int data){
   struct Node* newnode=createnode(data);
     if(*head==NULL){
       *head=newnode;
       return;
     struct Node* temp=*head;
     while(temp->next!=NULL){
       temp=temp->next;
     temp->next=newnode;
  void displayList(struct Node* head){
     struct Node* temp=head;
   while(temp!=NULL){
       printf("%d",temp->data);
```

```
if(temp->next!=NULL){
    printf(" ");
}
temp=temp->next;
}
int main(){
    int n,value;
    struct Node* head=NULL;
    scanf("%d",&n);
    for(int i=0;i<n;i++){
        scanf("%d",&value);
        insertnode(&head,value);
}
displayList(head);
    return 0;
}</pre>
```

Status: Correct

10/532

Marks: 10/10