# Rajalakshmi Engineering College

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Branch: REC

Department: I CSE AG

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;
    void insertEnd(struct Node**head,int data)
      struct Node*newNode=(struct Node*)malloc(sizeof(Node));
      struct Node*temp=*head;
      newNode->data=data;
      newNode->next=NULL;
      if(*head==NULL)
        *head=newNode;
        return;
      while(temp->next!=NULL)
        temp=temp->next;
      temp->next=newNode;
    void display(struct Node*head)
      struct Node*temp=head;
while(temp!=NULL)
{
while(temp!=NULL)
```

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

Marks : 10/10

Status: Correct

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