# Rajalakshmi Engineering College

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Branch: REC

Department: I AI & DS FB

Batch: 2028

Degree: B.E - AI & DS



## 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("%d",&rollno);
    temp->next = newnode(rollno);
    temp = temp->next;
}
traverse(head);
}
```

Status: Correct Marks: 10/10