

# Rajalakshmi Engineering College

Name: Pranav Shanmugam

Email: 240701395@rajalakshmi.edu.in

Roll no: 2116240701395

Phone: 8925357178

Branch: REC

Department: I CSE FD

Batch: 2028

Degree: B.E - CSE

Scan to verify results



## 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**