

# Rajalakshmi Engineering College

Name: Tarrun B

Email: 241801291@rajalakshmi.edu.in

Roll no: 241801291

Phone: 9840381059

Branch: REC

Department: I AI & DS FD

Batch: 2028

Degree: B.E - AI & DS

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**

# You are using Python

```
class Node:
```

```
    def __init__(self,roll_no):
```

```
        self.roll_no = roll_no
```

```
        self.next=None
```

```
class LinkedList:
```

```
    def __init__(self):
```

```
        self.head=None
```

```
    def ins(self, roll_no):
```

```
        new_node=Node(roll_no)
```

```
        if self.head is None:
```

```
            self.head=new_node
```

```
            return
```

```
        temp = self.head
```

```
        while temp.next:
```

```
            temp=temp.next
```

```
        temp.next=new_node
```

```
    def display(self):
```

```
        temp=self.head
```

```
        while temp:
```

```
            print(temp.roll_no,end=" ")
```

```
            temp=temp.next
```

```
        print()
```

```
N=int(input().strip())
```

```
roll_numbers=list(map(int,input().strip().split()))
```

```
student_list=LinkedList()
```

```
for roll_no in roll_numbers:
```

```
    student_list.ins(roll_no)
```

```
student_list.display()
```

**Status :** Correct

**Marks : 10/10**