

## ASSIGNMENT – 02

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OUTPUTS :

1 – 4 :

```
apple — test — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Progr
ms/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
1 : To Enter at Beginning
2 : To Enter at End
3 : Enter at a Particular index
4 : Print the Entire List
5 : Exit
6 : Delete at n
7 : Delete at begining
8 : Delete at end
9 : Reverse the Linkred List
Enter any choice : 1
Enter value :
45
1 : To Enter at Beginning
2 : To Enter at End
3 : Enter at a Particular index
4 : Print the Entire List
5 : Exit
6 : Delete at n
7 : Delete at begining
```

5 :

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Progr
ms/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Enter size of linked list : 3
Enter 0 element : 19
Enter 1 element : 45
Enter 2 element : 71
19 45 71
Enter a Index to find the nth node from the 'Last Node' of the linke
list : 3
19(base) Apples-MacBook-Pro:~ apple$
```

6:

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Progr
ms/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Input size of both linked list : 3
Input 1st linked list: 19
45
71
Input 2nd linked list : 19
91
71

Printing Similar Elements: 19 71 (base) Apples-MacBook-Pro:~ apple$
```

7:

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Progra
ms/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Input size of both linked list : 3
Input 1st linked list: 19
45
71
Input 2nd linked list : 21
27
15
After merging both the linked list :
19 21 27 15 45 71
(base) Apples-MacBook-Pro:~ apple$
```

8:

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Enter size of the linked list : 3

--Enter Data--
21
22
12

The list is : 21 22 12

---Now all the even numbers appear at the beginning---

The list is : 22 12 21
(base) Apples-MacBook-Pro:~ apple$
```

9:

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Enter size of linked list :3

Enter 0 element : 19

Enter 1 element : 45

Enter 2 element : 71

Enter a position to delete : 2
List is: 19 71
(base) Apples-MacBook-Pro:~ apple$
```

10:

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test

Enter size of linked list : 3
Enter 0 Element : 19
Enter 1 Element : 45
Enter 2 Element : 71

Before Swapping: the list is : 19 45 71

After Swapping: the list is : 45 19 71
(base) Apples-MacBook-Pro:~ apple$
```

**11 – 13 :**

```
apple — test — 69x22
1 : To enter at begining
2 : To enter at end
3 : Enter at a particular index
4 : print
5 : exit
6 : delete at n
7 : delete at begining
8 : delete at end
Enter any choice : 1
Enter value :
71
1 : To enter at begining
2 : To enter at end
3 : Enter at a particular index
4 : print
5 : exit
6 : delete at n
7 : delete at begining
8 : delete at end
Enter any choice : 4
71
1 : To enter at begining
```

**14 :**

```
apple — -bash — 69x22
((base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
((base) Apples-MacBook-Pro:~ apple$ ./test
Enter size of the Circular Linked List : 3
Enter 1 Element : 19
Enter 2 Element : 45
Enter 3 Element : 71
The circular linked list is : 19 45 71
(base) Apples-MacBook-Pro:~ apple$
```

15 :

```
apple — test — 69x22
((base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
((base) Apples-MacBook-Pro:~ apple$ ./test
Enter your choice :
1 : Insert Node
2 : Count number of Nodes
3 : Exit
1
Enter Data : 71
Enter your choice :
1 : Insert Node
2 : Count number of Nodes
3 : Exit
1
Enter Data : 19
Enter your choice :
1 : Insert Node
2 : Count number of Nodes
3 : Exit
2
There are 2 nodes in the list
Enter your choice :
```

16 :

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test

Enter the number of Node in the Circular Linked List : 3

Enter Head Data : 19

Enter 1 Data : 45

Enter 2 Data : 71
19
45
71
(base) Apples-MacBook-Pro:~ apple$
```

17 :

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Enter Number of Nodes : 3
Enter Data of 0 Node : 19
Enter Data of 1 Node : 45
Enter Data of 2 Node : 71
Insert Data at Beginning : 1
Insert Data at End : 0

---Linked List is---
1 19 45 71 0 (base) Apples-MacBook-Pro:~ apple$
```

18 :

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Enter Number of Nodes : 3
Enter data of 0 Node : 19
Enter Data of 1 Node : 45
Enter Data of 2 Node : 71

--Linked List is--
45
(base) Apples-MacBook-Pro:~ apple$
```

19 :

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Programs/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Enter the Number of Nodes : 3

Enter Data : 19

Enter Data : 45

Enter Data : 71
19 45 71 45(base) Apples-MacBook-Pro:~ apple$
```

21 :

```
apple — -bash — 69x22
[(base) Apples-MacBook-Pro:~ apple$ gcc /Users/apple/Desktop/C\ Progra
ms/test.c -o test
[(base) Apples-MacBook-Pro:~ apple$ ./test
Enter number of nodes : 3
Enter 3 elements in Doubly Circular Linked List : 19
45
71

--Linked List After Insertion of Elements--
Elements of Circular Linked List are : 80 19 45 71 10
--Linked List After Deletion of Elements--
Elements of Circular Linked List are : 19 45 71
(base) Apples-MacBook-Pro:~ apple$
```