

— Singly Linked List Operations —

1. Create Linked List
2. Insert at Beginning
3. Insert at Any Position
4. Insert at End
5. Display List
6. Exit

Enter your choice: 1

Enter number of nodes: 3

Enter data for node 1: 4

Enter data for node 2: 7

Enter data for node 3: 2

Linked list created successfully.

— Singly Linked List Operations —

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Enter your choice: 2

Enter data to insert: 7

Node inserted at the beginning.

— Singly Linked List Operations —

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Enter your choice: 5

Linked List: 7 → 4 → 7 → 2 → NULL

— Singly Linked List Operations —

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Enter your choice: 3

Enter data and position: 7 2

Node inserted at position 2.

— Singly Linked List Operations —

1. Create Linked List

6. Exit

Enter your choice: 5

Linked List: 7 -> 4 -> 7 -> 2 -> NULL

— Singly Linked List Operations —

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Enter your choice: 3

Enter data and position: 7 2

Node inserted at position 2.

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Enter your choice: 4

Enter data to insert: 9

Node inserted at the end.

— Singly Linked List Operations —

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Enter your choice: 5

Linked List: 7 -> 7 -> 4 -> 7 -> 2 -> 9 -> NULL

— Singly Linked List Operations —

1. Create Linked List
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Enter your choice: 6

Exiting...

Process returned 0 (0x0) execution time : 40.496 s

Press any key to continue.

a. $\text{temp} \rightarrow \text{next} = \text{newNode}$

Step	Action	Temp Node	New Node	Pointer
1.	Traverse to end	Temp = node(50)	-	10 → 20 → 20 → 40 → 50
2.	Create new node	-	55(next = NULL)	10 → 20 → 30 → 40 → 50
3.	Set $\text{temp} \rightarrow \text{next} = \text{newNode}$	50 → 55	55 → NULL	10 → 20 → 30 → 50

Step 15

See

(After insertion of 55)
 (head = head.next)
 (head = head.next)