

**Institute of Computer Technology**  
**B. Tech. Computer Science and Engineering**  
**Sub: DS (2CSE302)**

**Practical -14**

**Objective:** Implement the scenario based on linked list.

(This practical is in continuation of previous practical scenario, so append code of below scenario along with previous practical)

1. Inspire.Pvt.Ltd company is selling soft toys for children. Ridham is working in HR department of Inspire.Pvt.Ltd company. She needs to take order from the client however sometimes clients are asked to her for prepare details in ascending order after given order of some items. So as per the requirement of client she needs to the details of order as per following scenario. Refer it and provide appropriate solution for it:
  1. **Insert new item at the first position**
  2. **Insert new item at the last position**
  3. **Insert new item before the given value of node**
  4. **Insert new item after the given value of node**
  5. **Search item from the list**
  6. **Display all elements of the list**
  7. **Count total number of items**
  8. **Delete item from the first position**
  9. **Delete item from the last position**
  10. **Delete particular item**
  11. **Delete item before the given item**
  12. **Delete item after the given item**

Reference:

Enter the choice:

6

List is:

12

18

23

25

Enter the choice:

1

Insert item which you want to inset at first position:

10

Enter the choice:

2

Insert item which you want to insert at last position:

32

Enter the choice:

3

Insert item which you want to insert:

16

Insert item before where you want to insert:

18

Enter the choice:

6

List is:

10

12

16

18

23

25

32

Enter the choice:

8

Deleted item from the first position

Enter the choice:

9

Deleted item from the last position

Enter the choice:

10

Insert item which you want to delete:

16

Enter the choice:

11

Insert item before which you want to delete the item:

23

Enter the choice:

11

Insert item after which you want to delete the item:

12

Enter the choice:

6

List is:

12

25