**Aim:**

To implement a singly linked list and perform the following operations:

* Insertion of nodes at the beginning and end of the list.
* Deletion of nodes from the beginning and end of the list.
* Traversal of the list to display all elements.

**Algorithm:**

**1. Insertion at Beginning:**

1. Create a new node.
2. Assign the data to the new node.
3. Point the new node’s next to the current head.
4. Update the head to the new node.

**2. Insertion at End:**

1. Create a new node.
2. Assign the data to the new node.
3. If the list is empty, make the new node the head.
4. Else, traverse the list to the last node.
5. Point the last node’s next to the new node.

**3. Deletion from Beginning:**

1. If the list is empty, display an error.
2. Else, save the head node in a temporary pointer.
3. Update the head to the next node.
4. Free the temporary node.

**4. Deletion from End:**

1. If the list is empty, display an error.
2. If there is only one node, free it and update head to NULL.
3. Else, traverse to the second last node.
4. Free the last node and set second last node’s next to NULL.

**5. Traversal:**

1. Start from the head node.
2. While the current node is not NULL:
   * Print the data of the current node.
   * Move to the next node.

6. Exit

Enter your choice: 