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#include<iostream>
using namespace std;

//creating the node

struct Node{
    int data;
    Node *next; //it is Node type pointer as it points the next node.
};

class Singly{
private:
    Node *start;
public:
    Singly(){
        start = NULL;
    }

    //insert at the end
    void insertAtEnd(int val){

        Node *newNode = new Node;
        newNode->data = val;
        newNode->next = NULL;
        // check if the node linked list is empty or not
        if(start == NULL){
            start = newNode;
        }
        else {
            Node *currentNode = start;
            while(currentNode->next != NULL){
                currentNode = currentNode->next;
            }
            currentNode->next = newNode;
        }
    }

    //delete at the end
    void deleteAtEnd(){

        Node *temp1 = start, *temp2;
        while(temp1->next!=NULL){
            temp2 = temp1;
            temp1= temp1->next;
        }
    }
};

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        }
        temp2->next = NULL;
        delete temp1;

    }

// function to insert at start
void insertAtStart(int val){
//     creating the node
    Node *newNode = new Node;
    newNode->data = val;
    newNode->next = NULL;

    newNode->next = start;
    start = newNode;

}

// function to delete at start
void deleteAtStart(){
    Node *temp = new Node;
    temp=start;
    start = temp->next;
    delete temp;

}

// insert at given index
void insertAtIndex(int val, int index) {
    Node *newNode = new Node;
    newNode->data = val;
    newNode->next = NULL;

    int i = 1;
    Node *currentNode = start;

    if (index == 0) {
        newNode->next = start;
        start = newNode;
    } else {
        while (index > i) {
            if (currentNode->next != NULL) {
                currentNode = currentNode->next;
                ++i;
            }
        }
    }
}

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        } else {
            cout << "Index is very large so, inserting at end" << endl;
            break;
        }
    }

    newNode->next = currentNode->next;
    currentNode->next = newNode;
}
}

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// delete at specific index
void deleteAtIndex(int index){
    if (index < 0) {
        cout<< "Invalid index" << endl;
        return;
    }

    if (start == NULL) {
        cout << "List is empty" << endl;
        return;
    }

    if (index == 0) {
        Node* temp = start;
        start = start->next;
        delete temp;
        return;
    }

    Node* current = start;
    int currentIndex = 0;

    while (current != NULL && currentIndex < index - 1) {
        current = current->next;
        currentIndex++;
    }

    if (current == NULL || current->next == NULL) {
        cout << "Index out of bounds" <<endl;
        return;
    }
}

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Node* temp = current->next;
current->next = temp->next;
delete temp;
```

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}
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    // Function to display the contents of the list
void display() {
    Node* current = start;
    while (current != NULL) {
        cout << current->data << " ";
        current = current->next;
    }
    cout << endl;
}
};
```

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int main(){
    Singly sing;

    sing.insertAtEnd(5);
    sing.insertAtEnd(6);
    sing.insertAtEnd(7);
    sing.insertAtStart(4);
    sing.insertAtIndex(10,0);
    // sing.deleteAtStart();
    // sing.deleteAtEnd();
    sing.deleteAtIndex(3);
    sing.display();
}
```