```cpp
class Node {
public:
    int data;
    Node* next;
    Node(int val) : data(val), next(nullptr) {}
};

void insertAtBeginning(Node*& head, int val) {
    Node* newNode = new Node(val);
    newNode->next = head;
    head = newNode;
}

void insertAtEnd(Node*& head, int val) {
    Node* newNode = new Node(val);
    if (head == nullptr) {
        head = newNode;
        return;
    }
    Node* temp = head;
    while (temp->next != nullptr) {
        temp = temp->next;
    }
    temp->next = newNode;
}

void insertAtPosition(Node*& head, int val, int pos) {
    if (pos == 0) {
        insertAtBeginning(head, val);
        return;
    }
    Node* newNode = new Node(val);
    Node* temp = head;
    for (int i = 0; temp != nullptr && i < pos - 1; i++) {
        temp = temp->next;
    }
    if (temp == nullptr) {
        delete newNode;
        return;
    }
    newNode->next = temp->next;
    temp->next = newNode;
}

void deleteAtBeginning(Node*& head) {
    if (head == nullptr) return;
    Node* delNode = head;
    head = head->next;
    delete delNode;
}

void deleteAtEnd(Node*& head) {
    if (head == nullptr) return;
    if (head->next == nullptr) {
        delete head;
        head = nullptr;
        return;
    }
    Node* temp = head;
    while (temp->next->next != nullptr) {
        temp = temp->next;
    }
    delete temp->next;
    temp->next = nullptr;
}

void deleteAtPosition(Node*& head, int pos) {
    if (head == nullptr) return;
    if (pos == 0) {
        deleteAtBeginning(head);
        return;
    }
    Node* temp = head;
    for (int i = 0; temp->next != nullptr && i < pos - 1; i++) {
        temp = temp->next;
    }
    if (temp->next == nullptr) return;
    Node* delNode = temp->next;
    temp->next = temp->next->next;
    delete delNode;
}

void printList(Node* head) {
    Node* temp = head;
    while (temp != nullptr) {
        cout << temp->data << " -> ";
        temp = temp->next;
    }
    cout << "NULL\n";
}
```