

Index-225061X

```
#include <stdio.h>

#include <stdlib.h>

struct Node {
    int data;
    struct Node* next;
};

struct Node* head = NULL;

void insertAtEnd(int value) {
    struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
    newNode->data = value;
    newNode->next = NULL;
    if (head == NULL) {
        head = newNode;
        return;
    }
    struct Node* temp = head;
    while (temp->next != NULL) {
        temp = temp->next;
    }
    temp->next = newNode;
}

void deleteNode(int value) {
    struct Node* temp = head;
    struct Node* prev = NULL;

    if (temp != NULL && temp->data == value) {
```

```

        head = temp->next;
        free(temp);
        return;
    }
    while (temp != NULL && temp->data != value) {
        prev = temp;
        temp = temp->next;
    }
    if (temp == NULL) return;
    prev->next = temp->next;
    free(temp);
}

void displayList() {
    struct Node* temp = head;
    if (temp == NULL) {
        printf("List is empty.\n");
        return;
    }
    printf("Linked List: ");
    while (temp != NULL) {
        printf("%d -> ", temp->data);
        temp = temp->next;
    }
    printf("NULL\n");
}

int main() {
    int choice, value;
    while (1) {

```

```
printf("\nMenu:\n");
printf("1. Insert\n");
printf("2. Delete\n");
printf("3. Display\n");
printf("4. Exit\n");
printf("Enter your choice: ");
scanf("%d", &choice);
switch (choice) {
    case 1:
        printf("Enter value to insert: ");
        scanf("%d", &value);
        insertAtEnd(value);
        break;
    case 2:
        printf("Enter value to delete: ");
        scanf("%d", &value);
        deleteNode(value);
        break;
    case 3:
        displayList();
        break;
    case 4:
        exit(0);
    default:
        printf("Invalid choice. Try again.\n");
}
}
return 0;}
```

Output

```
Menu:
1. Insert
2. Delete
3. Display
4. Exit
Enter your choice: 1
Enter value to insert: 5
```

```
Menu:
1. Insert
2. Delete
3. Display
4. Exit
Enter your choice: 1
Enter value to insert: 9
```

```
Menu:
1. Insert
2. Delete
3. Display
4. Exit
Enter your choice: 2
Enter value to delete: 9
```

```
Menu:
1. Insert
2. Delete
3. Display
4. Exit
Enter your choice: 3
Linked List: 5 -> NULL
```

```
Menu:
```