

slideletion.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoryBlocks Settings Help

Start here x slideletion.c x

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 struct Node {
4     int data;
5     struct Node* next;
6 };
7 struct Node* head = NULL;
8 void createList(int n) {
9     struct Node *newNode, *temp;
10    int data, i;
11    for (i = 0; i < n; i++) {
12        printf("Enter data for node %d: ", i + 1);
13        scanf("%d", &data);
14        newNode = (struct Node*)malloc(sizeof(struct Node));
15        newNode->data = data;
16        newNode->next = NULL;
17
18        if (head == NULL)
19            head = newNode;
20        else {
21            temp = head;
22            while (temp->next != NULL)
23                temp = temp->next;
24            temp->next = newNode;
25        }
26    }
27 }
28 void deleteFirst() {
29     if (head == NULL)
30         printf("List is empty.\n");
31     else {
32         struct Node* temp = head;
33         head = head->next;
34         free(temp);
35         printf("First node deleted.\n");
36     }
37 }
38 void deleteLast() {
39     if (head == NULL)
40         printf("List is empty.\n");
41     else if (head->next == NULL) {
42         free(head);
43         head = NULL;
44         printf("Last node deleted.\n");
45     } else {
46         struct Node *temp = head, *prev = NULL;
47         while (temp->next != NULL) {
48             prev = temp;
49             temp = temp->next;
50         }
51         prev->next = NULL;
```

Activate Windows  
Go to Settings to activate Windows.

C:\Users\Admin\Desktop\slideletion.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 106, Col 30, Pos 2754 Insert Read/Write default ENG 12.00.37 PM 10-11-2025

slideletion.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoryBlocks Settings Help

Management Start here X slideletion.c X

Projects Files FSymbols Workspace

```
49     temp = temp->next;
50 }
51     prev->next = NULL;
52     free(temp);
53     printf("Last node deleted.\n");
54 }
55 }
56 void deleteSpecified(int value) {
57     struct Node *temp = head, *prev = NULL;
58     if (head == NULL) {
59         printf("List is empty.\n");
60         return;
61     }
62     if (head->data == value) {
63         head = head->next;
64         free(temp);
65         printf("Node with value %d deleted.\n", value);
66         return;
67     }
68     while (temp != NULL && temp->data != value) {
69         prev = temp;
70         temp = temp->next;
71     }
72     if (temp == NULL)
73         printf("Node with value %d not found.\n", value);
74     else {
75         prev->next = temp->next;
76         free(temp);
77         printf("Node with value %d deleted.\n", value);
78     }
79 }
80 void display() {
81     struct Node* temp = head;
82     if (head == NULL) {
83         printf("List is empty.\n");
84         return;
85     }
86     printf("Linked List: ");
87     while (temp != NULL) {
88         printf("%d -> ", temp->data);
89         temp = temp->next;
90     }
91     printf("NULL\n");
92 }
93 int main() {
94     int n, choice, value;
95     printf("Enter number of nodes: ");
96     scanf("%d", &n);
97     createList(n);
98     while (1) {
99         printf("\nMenu:\n");
```

Activate Windows  
Go to Settings to activate Windows.

C:\Users\Admin\Desktop\slideletion.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 106, Col 30, Pos 2754 Insert Read/Write default ENG 12.01.17 PM 10-11-2025

sldeletion.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoryBlocks Settings Help

Start here x sldeletion.c x

void display() {  
81 struct Node\* temp = head;  
82 if (head == NULL) {  
83 printf("List is empty.\n");  
84 return;  
85 }  
86 printf("Linked List: ");  
87 while (temp != NULL) {  
88 printf("%d -> ", temp->data);  
89 temp = temp->next;  
90 }  
91 printf("NULL\n");  
92 }  
93 int main() {  
94 int n, choice, value;  
95 printf("Enter number of nodes: ");  
96 scanf("%d", &n);  
97 createList(n);  
98 while (1) {  
99 printf("\nMenu:\n");  
100 printf("1. Delete first node\n");  
101 printf("2. Delete last node\n");  
102 printf("3. Delete specified node\n");  
103 printf("4. Display list\n");  
104 printf("5. Exit\n");  
105 printf("Enter your choice: ");  
106 scanf("%d", &choice);  
107 switch (choice) {  
108 case 1:  
109 deleteFirst();  
110 break;  
111 case 2:  
112 deleteLast();  
113 break;  
114 case 3:  
115 printf("Enter value to delete: ");  
116 scanf("%d", &value);  
117 deleteSpecified(value);  
118 break;  
119 case 4:  
120 display();  
121 break;  
122 case 5:  
123 exit(0);  
124 default:  
125 printf("Invalid choice.\n");  
126 }  
127 }  
128 return 0;  
129 }  
130 }

main() : int  
singly linked list

Management  
Projects Files FSymbols  
Workspace

Activate Windows  
Go to Settings to activate Windows.

C:\Users\Admin\Desktop\sldeletion.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 106, Col 30, Pos 2754 Insert Read/Write default ENG 12.01.38 PM 10-11-2025

C:\Users\Admin\Desktop\l1ldeletion.exe

```
Enter number of nodes: 5
Enter data for node 1: 10
Enter data for node 2: 20
Enter data for node 3: 30
Enter data for node 4: 40
Enter data for node 5: 50
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 1
First node deleted.
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 4
Linked List: 20 -> 30 -> 40 -> 50 -> NULL
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 2
Last node deleted.
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 4
Linked List: 20 -> 30 -> 40 -> NULL
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 3
Enter value to delete: 30
Node with value 30 deleted.
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 4
Linked List: 20 -> 40 -> NULL
```

Menu:

Activate Windows  
Go to Settings to activate Windows.

Type here to search

ENG 12:01:58 PM  
UK 10-11-2025

C:\Users\Admin\Desktop\l1ldeletion.exe

```
5. Exit
Enter your choice: 2
Last node deleted.
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 4
Linked List: 20 -> 30 -> 40 -> NULL
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 3
Enter value to delete: 30
Node with value 30 deleted.
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 4
Linked List: 20 -> 40 -> NULL
```

```
Menu:
1. Delete first node
2. Delete last node
3. Delete specified node
4. Display list
5. Exit
Enter your choice: 5

Process returned 0 (0x0)   execution time : 58.524 s
Press any key to continue.
```

Activate Windows  
Go to Settings to activate Windows.

Type here to search

ENG 12:02:21 PM  
UK 10-11-2025