

```
D:\1BF24CS107\lab7.exe  X + v
---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 4
DLL: 10 <--> 20 <--> 30 <--> NULL

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 3
Enter value to delete: 15
Value 15 not found in list

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 4
DLL: 10 <--> 20 <--> 30 <--> NULL

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 5

Process returned 0 (0x0)   execution time : 38.005 s
Press any key to continue.
|
```

9:25°C Sunny

Windows taskbar icons: File Explorer, Search, Task View, Edge, Firefox, VS Code, etc.

System tray: ENG US, 12:08:00, 24-11-2025

```
D:\1BF24CS107\lab7.exe X + v

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 1
Enter value to insert: 10

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 1
Enter value to insert: 20

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 1
Enter value to insert: 30

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 2
Insert new value: 20
Insert to the left of value: 15
Node with value 15 not found

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
3. Delete a node by value
4. Display list
5. Exit
Enter your choice: 4
DLL: 10 <--> 20 <--> 30 <--> NULL

---- Doubly Linked List Menu ----
1. Create (Insert at end)
2. Insert to left of a node
```

9:25°C Sunny

12:07:46 24-11-2025

lab7.c - Code::Blocks 20.03

FileEditViewSearchProjectBuildDebugFortranwxSmithToolsTools+PluginsDoxyBlocksSettingsHelp

<global>

S C

Start here x lab7.c x

73 if (temp == head) {
74 head = temp->next;
75 if (head != NULL)
76 head->prev = NULL;
77 free(temp);
78 return;
79 }
80
81 if (temp->next == NULL) {
82 temp->prev->next = NULL;
83 free(temp);
84 return;
85 }
86
87 temp->prev->next = temp->next;
88 temp->next->prev = temp->prev;
89 free(temp);
90 }
91
92 void display() {
93 struct node *temp = head;
94
95 printf("DLL: ");
96 while (temp != NULL) {
97 printf("%d <-> ", temp->data);
98 temp = temp->next;
99 }
100 printf("NULL\n");
101 }
102
103 int main() {
104 int choice, value, x, pos;
105
106 while (1) {
107 printf("\n---- Doubly Linked List Menu ----\n");
108 printf("1. Create (Insert at end)\n");
109 printf("2. Insert to left of a node\n");

Logs & others

Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cscope x Debugger x DoxyBlocks x Fortran info x Closed files list x Thread search x

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

D:\18F24CS107\lab7.c

C/C++ Windows (CR+LF) WINDOWS-1252 Line 11, Col 1, Pos 154 Overwrite Read/Write default

25°C Sunny

ENG US 12:07:02 24-11-2025

lab7.c - Code::Blocks 20.03

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

<global>

Start here x lab7.c x

```
109     printf("2. Insert to left of a node\n");
110     printf("3. Delete a node by value\n");
111     printf("4. Display list\n");
112     printf("5. Exit\n");
113     printf("Enter your choice: ");
114     scanf("%d", &choice);
115
116     switch (choice) {
117     case 1:
118         printf("Enter value to insert: ");
119         scanf("%d", &value);
120         insertAtEnd(value);
121         break;
122
123     case 2:
124         printf("Insert new value: ");
125         scanf("%d", &value);
126         printf("Insert to the left of value: ");
127         scanf("%d", &x);
128         insertLeft(value, x);
129         break;
130
131     case 3:
132         printf("Enter value to delete: ");
133         scanf("%d", &value);
134         deleteByValue(value);
135         break;
136
137     case 4:
138         display();
139         break;
140
141     case 5:
142         exit(0);
143
144     default:
145         printf("Invalid choice! Try again.\n");
```

Logs & others

Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cscope x Debugger x DoxyBlocks x Fortran info x Closed files list x Thread search x

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

D:\18F24CS107\lab7.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 11, Col 1, Pos 154 Overwrite Read/Write default

9°C 25°C Sunny Windows taskbar icons: File Explorer, Edge, Firefox, VS Code, etc. System tray: ENG US, 12:07:21, 24-11-2025

lab7.c - Code::Blocks 20.03

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

<global>

Start here x lab7.c x

```
114 scanf("%d", &choice);
115
116 switch (choice) {
117 case 1:
118     printf("Enter value to insert: ");
119     scanf("%d", &value);
120     insertAtEnd(value);
121     break;
122
123 case 2:
124     printf("Insert new value: ");
125     scanf("%d", &value);
126     printf("Insert to the left of value: ");
127     scanf("%d", &x);
128     insertLeft(value, x);
129     break;
130
131 case 3:
132     printf("Enter value to delete: ");
133     scanf("%d", &value);
134     deleteByValue(value);
135     break;
136
137 case 4:
138     display();
139     break;
140
141 case 5:
142     exit(0);
143
144 default:
145     printf("Invalid choice! Try again.\n");
146 }
147 }
148 return 0;
149 }
150 }
```

Logs & others

Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cscope x Debugger x DoxyBlocks x Fortran info x Closed files list x Thread search x

File	Line	Message
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D:\18F24CS107\lab7.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 11, Col 1, Pos 154 Overwrite Read/Write default ENG US 12:07:31 24-11-2025

9°C 25°C Sunny

lab7.c - Code::Blocks 20.03

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

<global>

Start here x lab7.c x

```
37 struct node *temp = head;
38
39 while (temp != NULL && temp->data != existingValue)
40     temp = temp->next;
41
42 if (temp == NULL) {
43     printf("Node with value %d not found\n", existingValue);
44     return;
45 }
46
47 struct node *newNode = createNode(newValue);
48
49 if (temp == head) {
50     newNode->next = head;
51     head->prev = newNode;
52     head = newNode;
53     return;
54 }
55
56 newNode->next = temp;
57 newNode->prev = temp->prev;
58 temp->prev->next = newNode;
59 temp->prev = newNode;
60 }
61
62 void deleteByValue(int value) {
63     struct node *temp = head;
64
65     while (temp != NULL && temp->data != value)
66         temp = temp->next;
67
68     if (temp == NULL) {
69         printf("Value %d not found in list\n", value);
70         return;
71     }
72
73     if (temp == head) {
```

Logs & others

Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cscope x Debugger x DoxyBlocks x Fortran info x Closed files list x Thread search x

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

D:\1BF24CS107\lab7.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 11, Col 1, Pos 154 Overwrite Read/Write default ENG US 12:06:50 24-11-2025

25°C Sunny

lab7.c - Code::Blocks 20.03

FileEditViewSearchProjectBuildDebugFortranwxSmithToolsTools+PluginsDoxyBlocksSettingsHelp

<global>

S C

Start here xlab7.c x

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  struct node {
5      int data;
6      struct node *prev;
7      struct node *next;
8  };
9
10 struct node *head = NULL;
11
12 struct node* createNode(int value) {
13     struct node *newNode = (struct node*)malloc(sizeof(struct node));
14     newNode->data = value;
15     newNode->prev = NULL;
16     newNode->next = NULL;
17     return newNode;
18 }
19
20 void insertAtEnd(int value) {
21     struct node *newNode = createNode(value);
22
23     if (head == NULL) {
24         head = newNode;
25         return;
26     }
27
28     struct node *temp = head;
29     while (temp->next != NULL)
30         temp = temp->next;
31
32     temp->next = newNode;
33     newNode->prev = temp;
34 }
35
36 void insertLeft(int newValue, int existingValue) {
37     struct node *temp = head;
```

Logs & others

Code::Blocks xSearch results xCccc xBuild log xBuild messages xCppCheck/Vera++ xCppCheck/Vera++ messages xCscope xDebugger xDoxyBlocks xFortran info xClosed files list xThread search x

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

D:\1BF24CS107\lab7.c

C/C++Windows (CR+LF)WINDOWS-1252Line 11, Col 1, Pos 154OverwriteRead/Writedefault

9°C25°C Sunny

ENG US12:06:2324-11-2025