

sort reverse concatenate using sll.c - Code::Blocks 20.03

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

Management X Start here X sort reverse concatenate using sll.c X

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 struct Node {
5     int data;
6     struct Node* next;
7 };
8
9 struct Node* createNode(int value) {
10    struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
11    newNode->data = value;
12    newNode->next = NULL;
13    return newNode;
14 }
15
16 void insertEnd(struct Node** head, int value) {
17    struct Node* newNode = createNode(value);
18
19    if (*head == NULL) {
20        *head = newNode;
21        return;
22    }
23
24    struct Node* temp = *head;
25    while (temp->next != NULL)
26        temp = temp->next;
27
28    temp->next = newNode;
29 }
30
31 void display(struct Node* head) {
32    if (head == NULL) {
33        printf("List is empty.\n");
34        return;
35    }
36
37    printf("List: ");
38    while (head != NULL) {
39        printf("%d -> ", head->data);
40        head = head->next;
41    }
42    printf("NULL\n");
43 }
44
45 void sortList(struct Node* head) {
46    if (head == NULL) return;
47
48    struct Node *i, *j;
49    int temp;
50
51    for (i = head; i != NULL; i = i->next) {
52        for (j = i->next; j != NULL; j = j->next) {
53            if (i->data > j->data) {
54                temp = i->data;
```

Activate Windows
Go to Settings to activate Windows.

C:\Users\Admin\Desktop\sort reverse concatenate using sll.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 87, Col 1, Pos 1802 Insert Read/Write default

23°C Mostly sunny 11.00.30 AM 24-11-2025

sort reverse concatenate using sll.c - Code::Blocks 20.03

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

Management X Start here X sort reverse concatenate using sll.c X

```
52     for (j = i->next; j != NULL; j = j->next) {
53         if (i->data > j->data) {
54             temp = i->data;
55             i->data = j->data;
56             j->data = temp;
57         }
58     }
59 }
60 }
61
62 void reverseList(struct Node** head) {
63     struct Node *prev = NULL, *current = *head, *next = NULL;
64
65     while (current != NULL) {
66         next = current->next;
67         current->next = prev;
68         prev = current;
69         current = next;
70     }
71
72     *head = prev;
73 }
74
75 void concatenate(struct Node** head1, struct Node* head2) {
76     if (*head1 == NULL) {
77         *head1 = head2;
78         return;
79     }
80
81     struct Node* temp = *head1;
82     while (temp->next != NULL)
83         temp = temp->next;
84
85     temp->next = head2;
86 }
87
88 int main() {
89     struct Node *head1 = NULL, *head2 = NULL;
90     int choice, value, n;
91
92     while (1) {
93         printf("\n--- MENU ---\n");
94         printf("1. Insert into List 1\n");
95         printf("2. Insert into List 2\n");
96         printf("3. Display List 1\n");
97         printf("4. Display List 2\n");
98         printf("5. Sort List 1\n");
99         printf("6. Reverse List 1\n");
100        printf("7. Concatenate List 2 to List 1\n");
101        printf("8. Exit\n");
102        printf("Enter your choice: ");
103        scanf("%d", &choice);
104
105        switch (choice) {
```

Activate Windows
Go to Settings to activate Windows.

C:\Users\Admin\Desktop\sort reverse concatenate using sll.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 87, Col 1, Pos 1802 Insert Read/Write default

23°C Mostly sunny 11.01.04 AM 24-11-2025

sort reverse concatenate using sll.c - Code::Blocks 20.03

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

Management X Start here X sort reverse concatenate using sll.c X

Projects View: Search:

```
99     printf("6. Reverse List 1\n");
100    printf("7. Concatenate List 2 to List 1\n");
101    printf("8. Exit\n");
102    printf("Enter your choice: ");
103    scanf("%d", &choice);

104    switch (choice) {
105        case 1:
106            printf("Enter value: ");
107            scanf("%d", &value);
108            insertEnd(&head1, value);
109            break;

110        case 2:
111            printf("Enter value: ");
112            scanf("%d", &value);
113            insertEnd(&head2, value);
114            break;

115        case 3:
116            display(head1);
117            break;

118        case 4:
119            display(head2);
120            break;

121        case 5:
122            sortList(head1);
123            printf("List 1 sorted.\n");
124            break;

125        case 6:
126            reverseList(&head1);
127            printf("List 1 reversed.\n");
128            break;

129        case 7:
130            concatenate(&head1, head2);
131            printf("Lists concatenated.\n");
132            break;

133        case 8:
134            exit(0);

135        default:
136            printf("Invalid choice!\n");
137    }

138    return 0;
139}
140}
141}
142}
143}
144}
145}
146}
147}
148}
149}
150}
151}
152}
```

Activate Windows
Go to Settings to activate Windows.

C:\Users\Admin\Desktop\sort reverse concatenate using sll.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 87, Col 1, Pos 1802 Insert Read/Write default

23°C Mostly sunny 11.01.31 AM 24-11-2025

C:\Users\Admin\Desktop\sort reverse concatenate using sll.exe"

```
--- MENU ---  
1. Insert into List 1  
2. Insert into List 2  
3. Display List 1  
4. Display List 2  
5. Sort List 1  
6. Reverse List 1  
7. Concatenate List 2 to List 1  
8. Exit  
Enter your choice: 1  
Enter value: 10
```

```
--- MENU ---  
1. Insert into List 1  
2. Insert into List 2  
3. Display List 1  
4. Display List 2  
5. Sort List 1  
6. Reverse List 1  
7. Concatenate List 2 to List 1  
8. Exit  
Enter your choice: 1  
Enter value: 5
```

```
--- MENU ---  
1. Insert into List 1  
2. Insert into List 2  
3. Display List 1  
4. Display List 2  
5. Sort List 1  
6. Reverse List 1  
7. Concatenate List 2 to List 1  
8. Exit  
Enter your choice: 1  
Enter value: 20
```

```
--- MENU ---  
1. Insert into List 1  
2. Insert into List 2  
3. Display List 1  
4. Display List 2  
5. Sort List 1  
6. Reverse List 1  
7. Concatenate List 2 to List 1  
8. Exit  
Enter your choice: 3  
List: 10 -> 5 -> 20 -> NULL
```

```
--- MENU ---  
1. Insert into List 1  
2. Insert into List 2  
3. Display List 1  
4. Display List 2  
5. Sort List 1  
6. Reverse List 1  
7. Concatenate List 2 to List 1  
8. Exit  
Enter your choice: 2  
Enter value: 100
```

```
--- MENU ---  
1. Insert into List 1
```

Activate Windows
Go to Settings to activate Windows.



23°C Mostly sunny 11.02.41 AM
24-11-2025

C:\Users\Admin\Desktop\sort reverse concatenate using sll.exe"

--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice: 2
Enter value: 200

--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice: 7
Lists concatenated.

--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice: 3
List: 10 -> 5 -> 20 -> 100 -> 200 -> NULL

--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice: 5
List 1 sorted.

--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice: 3
List: 5 -> 10 -> 20 -> 100 -> 200 -> NULL

--- MENU ---
1. Insert into List 1

Activate Windows
Go to Settings to activate Windows.

C:\Users\Admin\Desktop\sort reverse concatenate using sll.exe"

```
--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice: 6
List 1 reversed.
```

```
--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice: 3
List: 200 -> 100 -> 20 -> 10 -> 5 -> NULL
```

```
--- MENU ---
1. Insert into List 1
2. Insert into List 2
3. Display List 1
4. Display List 2
5. Sort List 1
6. Reverse List 1
7. Concatenate List 2 to List 1
8. Exit
Enter your choice:
```

Activate Windows
Go to Settings to activate Windows.



23°C Mostly sunny 11.03.49 AM
24-11-2025