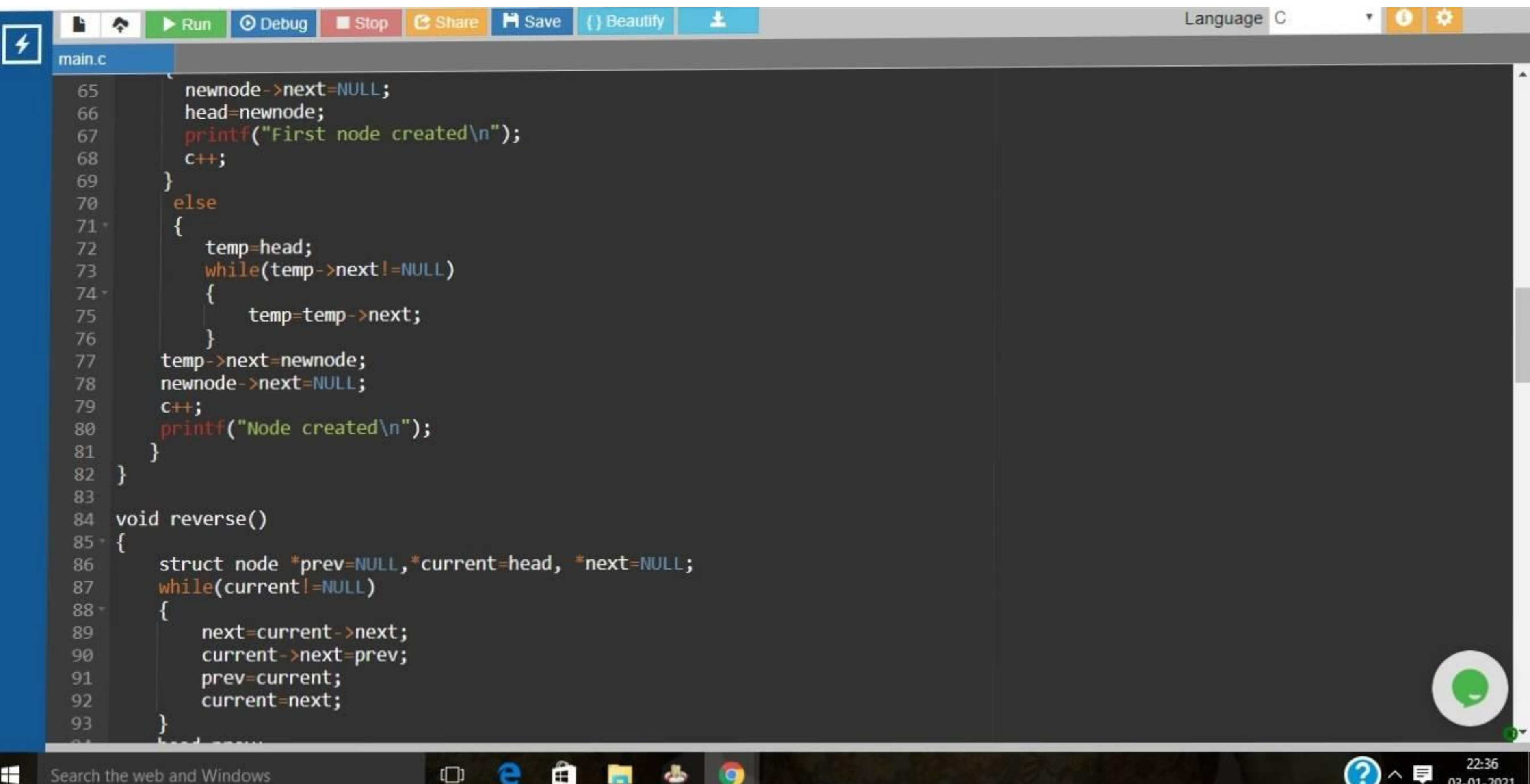


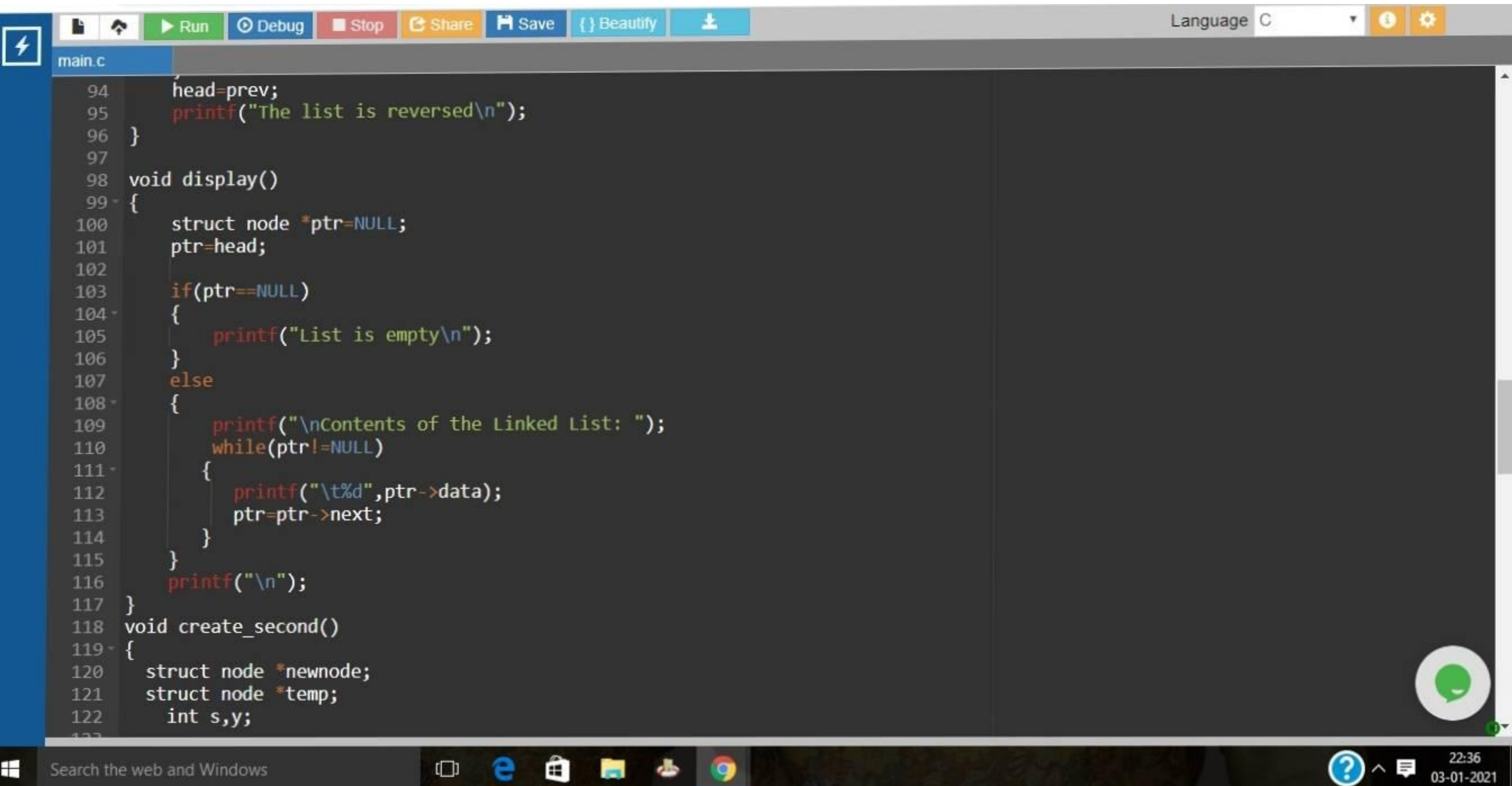
The image shows a screenshot of a C code editor. The editor has a dark theme and a toolbar at the top with buttons for Run, Debug, Stop, Share, Save, Beautify, and a download icon. The language is set to C. The code is in a file named main.c and implements a linked list with functions for sorting, creating, reversing, concatenating, and displaying. The main function uses a switch statement to handle user input.

```
9 #include <stdio.h>
10 #include <stdlib.h>
11 void sort();
12 void create();
13 void reverse();
14 void create_second();
15 void concatenate();
16 void display();
17 struct node
18 {
19     int data;
20     struct node *next;
21 };
22 struct node *head=NULL;
23 struct node *head2= NULL;
24 int c;
25
26 int main()
27 {
28     int choice;
29     do
30     {
31         printf("\n1. Create\n2. Sort\n3. Reverse\n4. Enter second list\n5. Concatenate\n6. Display\n7. Exit");
32         printf("\nEnter your choice : ");
33         scanf("%d",&choice);
34         switch(choice)
35         {
36             case 1: create();
37                 break;
38             case 2: sort();
```

```
main.c
36     case 1: create();
37         break;
38     case 2: sort();
39         break;
40     case 3: reverse();
41         break;
42     case 4: create_second();
43         break;
44     case 5: concatenate();
45         break;
46     case 6: display();
47         break;
48     case 7: exit(0);
49 }
50 while(choice != 7);
51 return 0;
52 }
53
54 void create()
55 {
56     struct node *newnode;
57     struct node *temp;
58     int s;
59     printf("Enter integer : ");
60     scanf("%d",&s);
61     newnode=(struct node*)malloc(sizeof(struct node));
62     newnode->data =s;
63     if (head==NULL)
64     {
65         newnode->next=NULL;
```

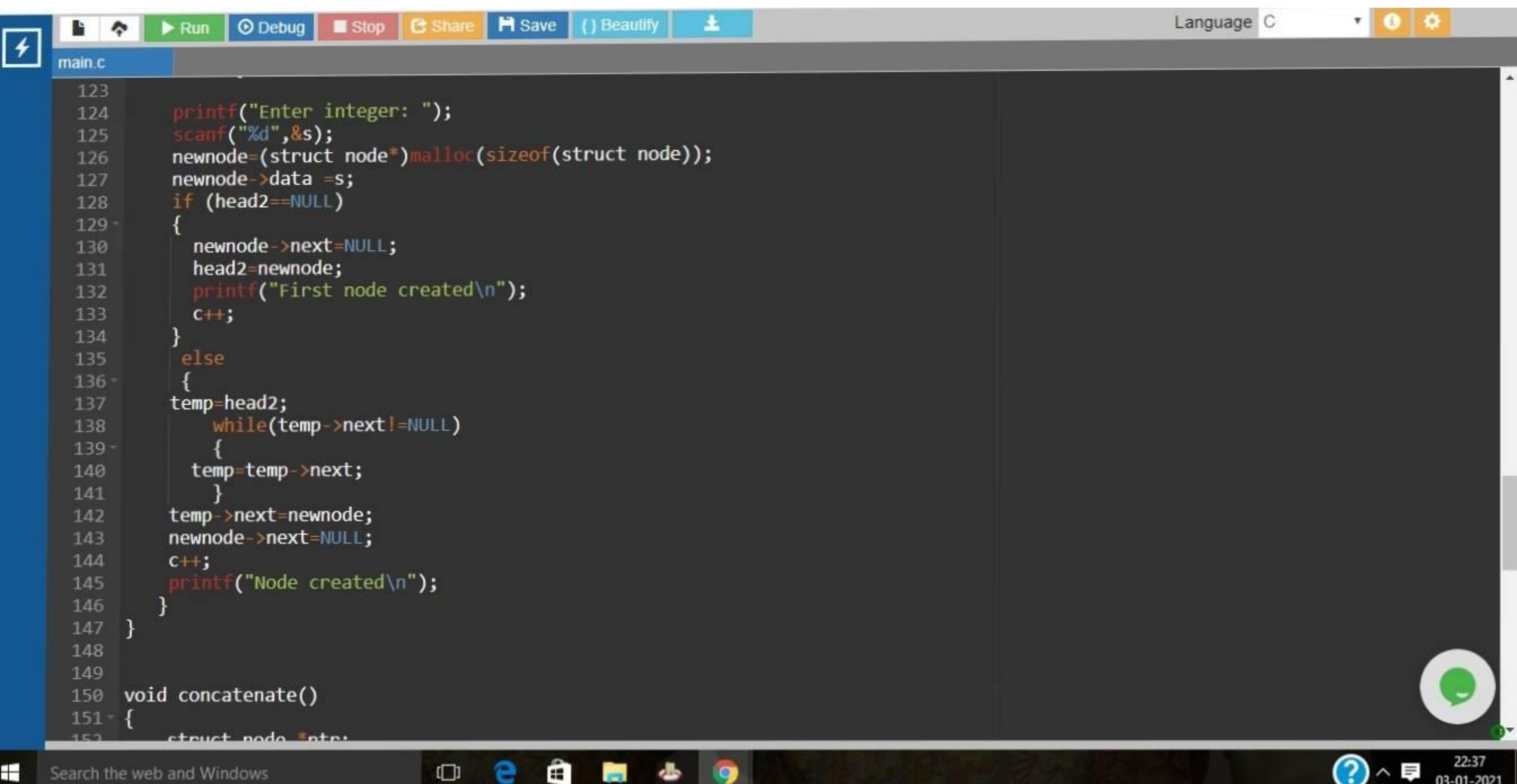



```
65     newnode->next=NULL;
66     head=newnode;
67     printf("First node created\n");
68     c++;
69 }
70 else
71 {
72     temp=head;
73     while(temp->next!=NULL)
74     {
75         temp=temp->next;
76     }
77     temp->next=newnode;
78     newnode->next=NULL;
79     c++;
80     printf("Node created\n");
81 }
82 }
83
84 void reverse()
85 {
86     struct node *prev=NULL, *current=head, *next=NULL;
87     while(current!=NULL)
88     {
89         next=current->next;
90         current->next=prev;
91         prev=current;
92         current=next;
93     }
94     head=prev;
```



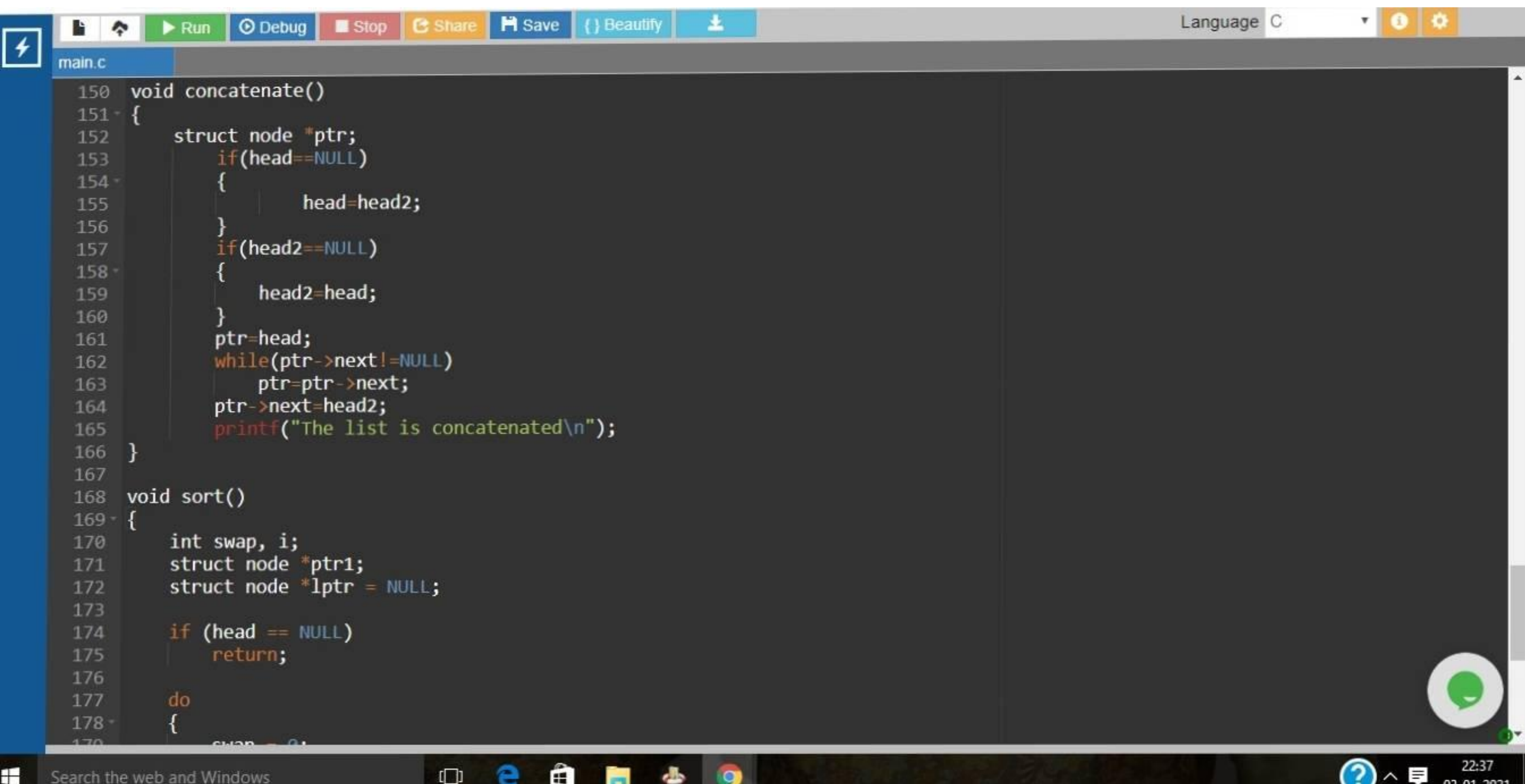
The image shows a screenshot of a code editor window with a dark theme. The editor displays C code for reversing a linked list. The code includes functions for displaying the list and creating a second node. The Windows taskbar is visible at the bottom, and a WhatsApp icon is in the bottom right corner of the editor.

```
main.c
94     head=prev;
95     printf("The list is reversed\n");
96 }
97
98 void display()
99 {
100     struct node *ptr=NULL;
101     ptr=head;
102
103     if(ptr==NULL)
104     {
105         printf("List is empty\n");
106     }
107     else
108     {
109         printf("\nContents of the Linked List: ");
110         while(ptr!=NULL)
111         {
112             printf("\t%d",ptr->data);
113             ptr=ptr->next;
114         }
115     }
116     printf("\n");
117 }
118 void create_second()
119 {
120     struct node *newnode;
121     struct node *temp;
122     int s,y;
123 }
```

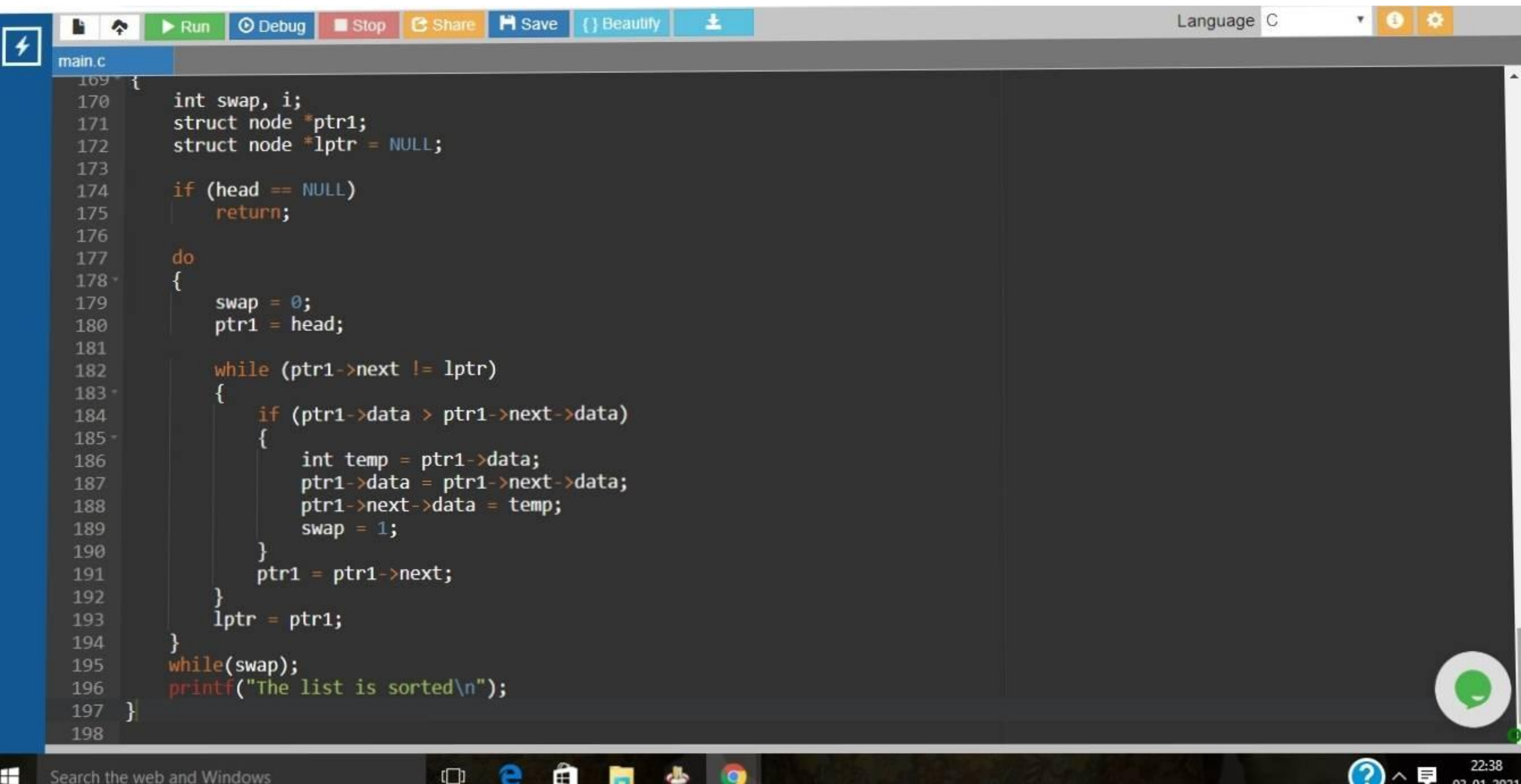
The image shows a screenshot of a code editor interface. At the top, there is a toolbar with buttons for Run, Debug, Stop, Share, Save, and Beautify. The language is set to C. The code is in a file named main.c and consists of two functions: a loop to create a linked list and a concatenate function. The first function starts at line 123 and ends at line 147. It prompts the user to enter an integer, scans it, allocates a new node, and links it to the existing list. The second function, concatenate, starts at line 150 and is partially visible at line 151.

```
123
124     printf("Enter integer: ");
125     scanf("%d",&s);
126     newnode=(struct node*)malloc(sizeof(struct node));
127     newnode->data =s;
128     if (head2==NULL)
129     {
130         newnode->next=NULL;
131         head2=newnode;
132         printf("First node created\n");
133         c++;
134     }
135     else
136     {
137         temp=head2;
138         while(temp->next!=NULL)
139         {
140             temp=temp->next;
141         }
142         temp->next=newnode;
143         newnode->next=NULL;
144         c++;
145         printf("Node created\n");
146     }
147 }
148
149
150 void concatenate()
151 {
152     struct node *ptr;
```



The image shows a screenshot of a code editor window with a dark theme. The editor has a toolbar at the top with buttons for Run, Debug, Stop, Share, Save, Beautify, and a user icon. The language is set to C. The code is in a file named main.c and consists of two functions: concatenate() and sort().

```
150 void concatenate()
151 {
152     struct node *ptr;
153     if(head==NULL)
154     {
155         head=head2;
156     }
157     if(head2==NULL)
158     {
159         head2=head;
160     }
161     ptr=head;
162     while(ptr->next!=NULL)
163         ptr=ptr->next;
164     ptr->next=head2;
165     printf("The list is concatenated\n");
166 }
167
168 void sort()
169 {
170     int swap, i;
171     struct node *ptr1;
172     struct node *lptr = NULL;
173
174     if (head == NULL)
175         return;
176
177     do
178     {
179         swap = 0;
```



```
169 {
170     int swap, i;
171     struct node *ptr1;
172     struct node *lptr = NULL;
173
174     if (head == NULL)
175         return;
176
177     do
178     {
179         swap = 0;
180         ptr1 = head;
181
182         while (ptr1->next != lptr)
183         {
184             if (ptr1->data > ptr1->next->data)
185             {
186                 int temp = ptr1->data;
187                 ptr1->data = ptr1->next->data;
188                 ptr1->next->data = temp;
189                 swap = 1;
190             }
191             ptr1 = ptr1->next;
192         }
193         lptr = ptr1;
194     }
195     while(swap);
196     printf("The list is sorted\n");
197 }
198
```

main.c

Language C

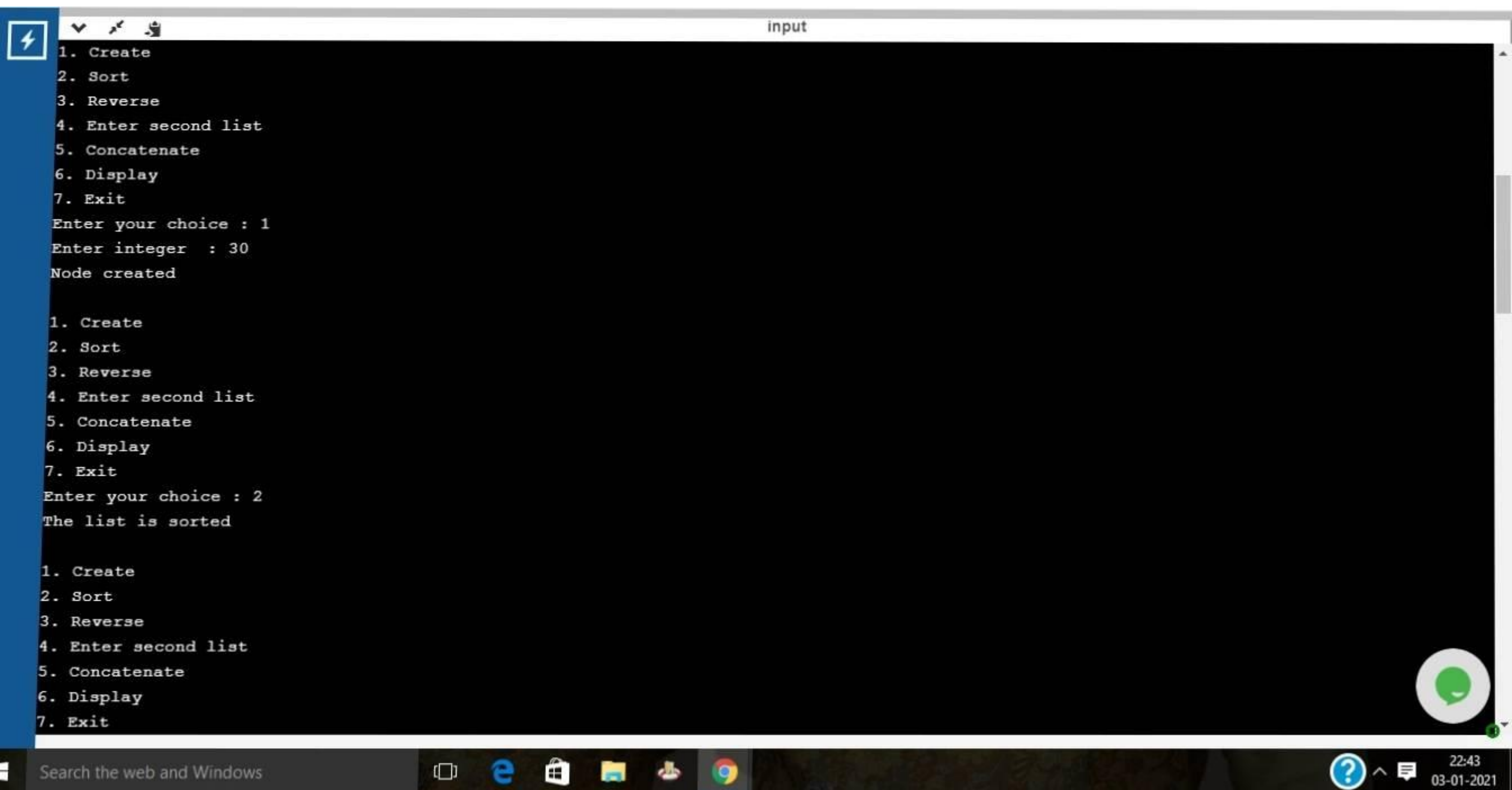
Search the web and Windows

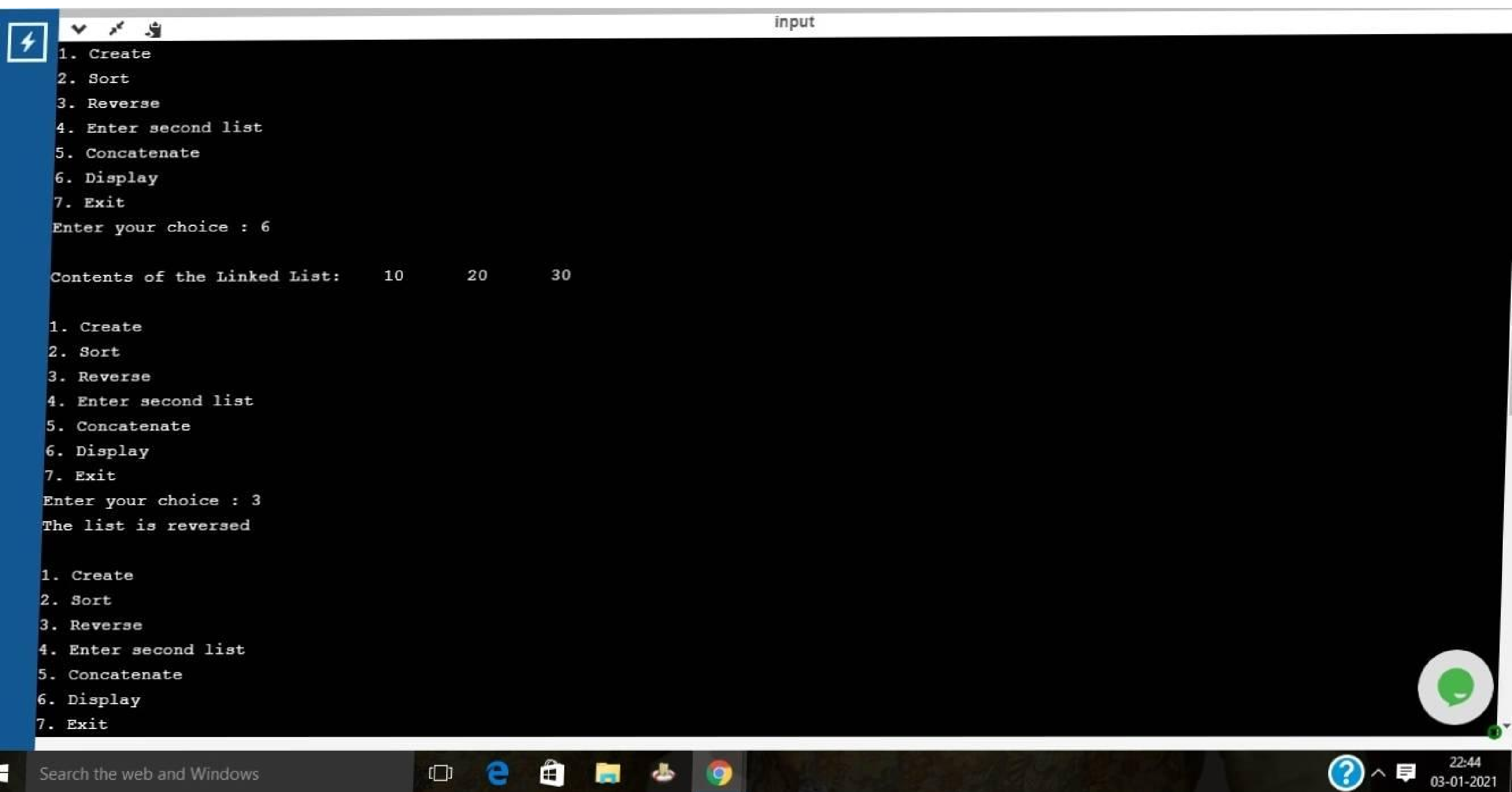
22:38 02.01.2021


```
input
1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 1
Enter integer : 10
First node created

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 1
Enter integer : 20
Node created

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
```



```
input
1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 6

Contents of the Linked List: 30 20 10

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 4
Enter integer: 50
First node created

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
```



```
input
1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 1
Enter integer : 60
Node created

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 3
The list is reversed

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
```

```
input
6. Display
7. Exit
Enter your choice : 3
The list is reversed

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 6

Contents of the Linked List:  60      10      20      30

1. Create
2. Sort
3. Reverse
4. Enter second list
5. Concatenate
6. Display
7. Exit
Enter your choice : 7

...Program finished with exit code 0
Press ENTER to exit console.
```