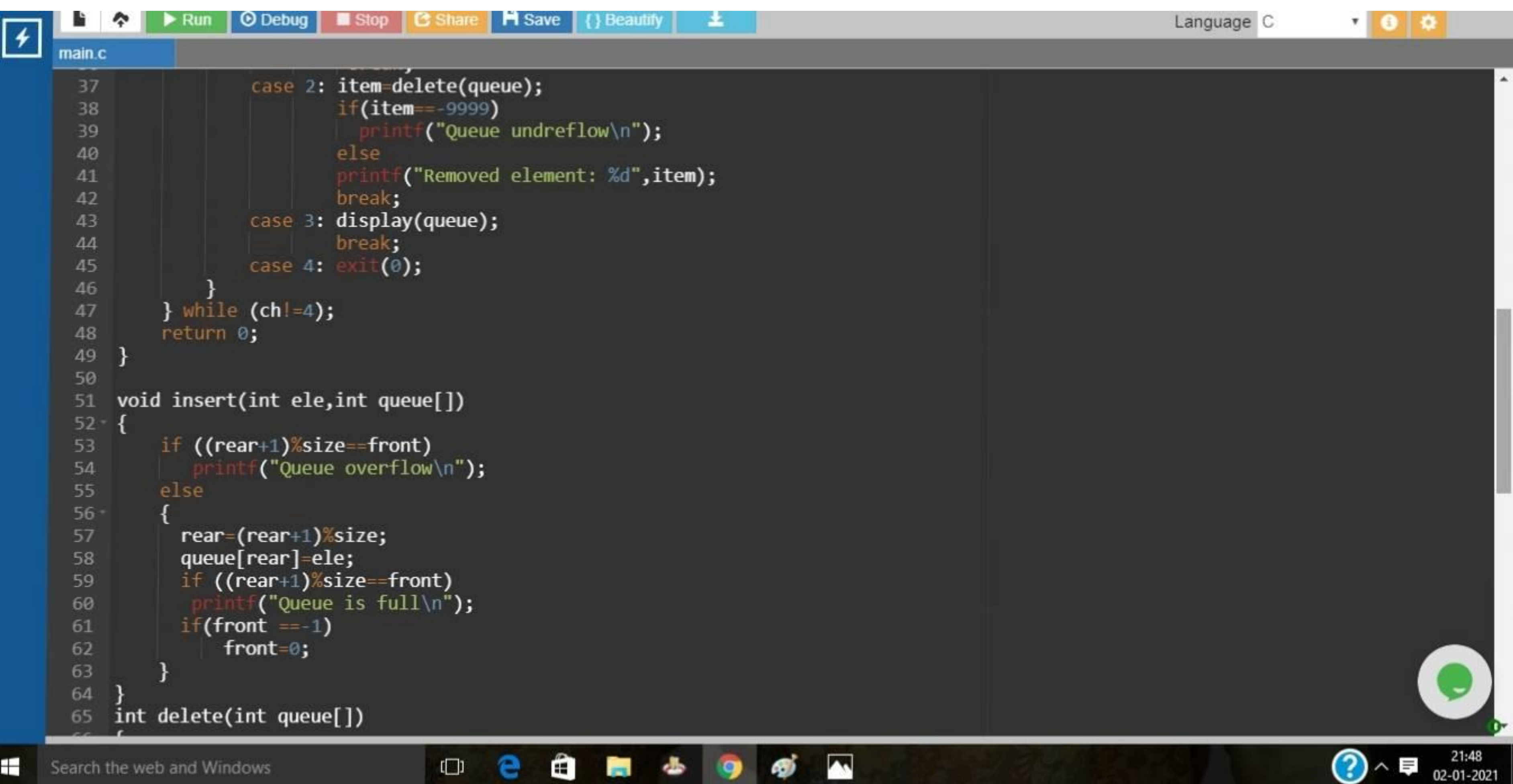
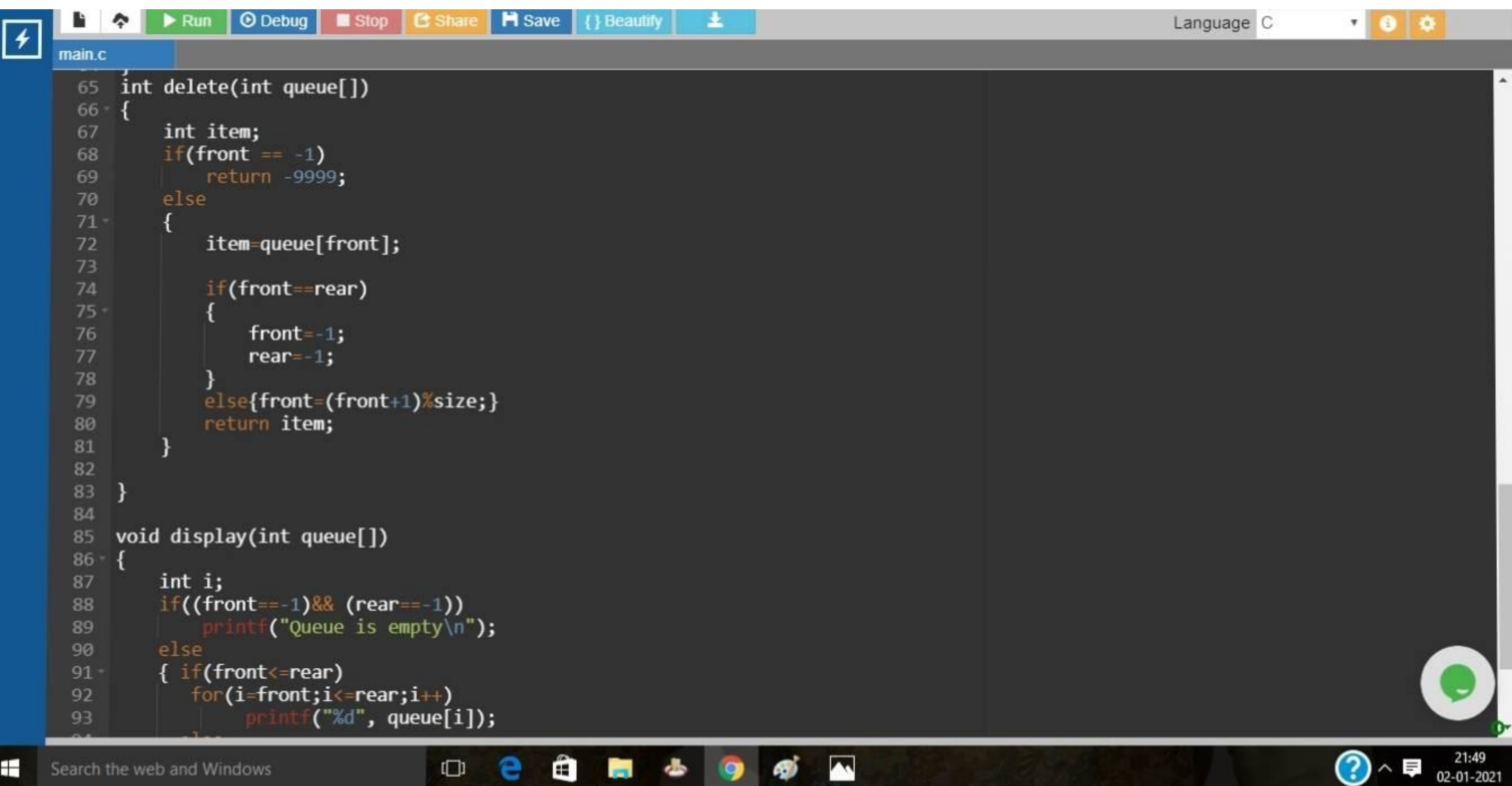


```
8
9 #include <stdio.h>
10 #include <stdlib.h>
11 #define size 3
12
13 int front=-1;
14 int rear=-1;
15
16
17 void insert(int,int []);
18 int delete(int []);
19 void display(int []);
20 int main()
21 {
22     int ch,queue[size];;
23     int item;
24     do{
25         printf("\n\n 1. Insert to Queue: ");
26         printf("\n 2. delete from the Queue: ");
27         printf("\n 3. Display Queue\n ");
28         printf("\n 4. Exit\n");
29         printf("Enter the option :");
30         scanf("%d",&ch);
31         switch(ch)
32         {
33             case 1: printf("Enter the element\n");
34                     scanf("%d",&item);
35                     insert(item,queue);
36                     break;
37             case 2: item=delete(queue);
```

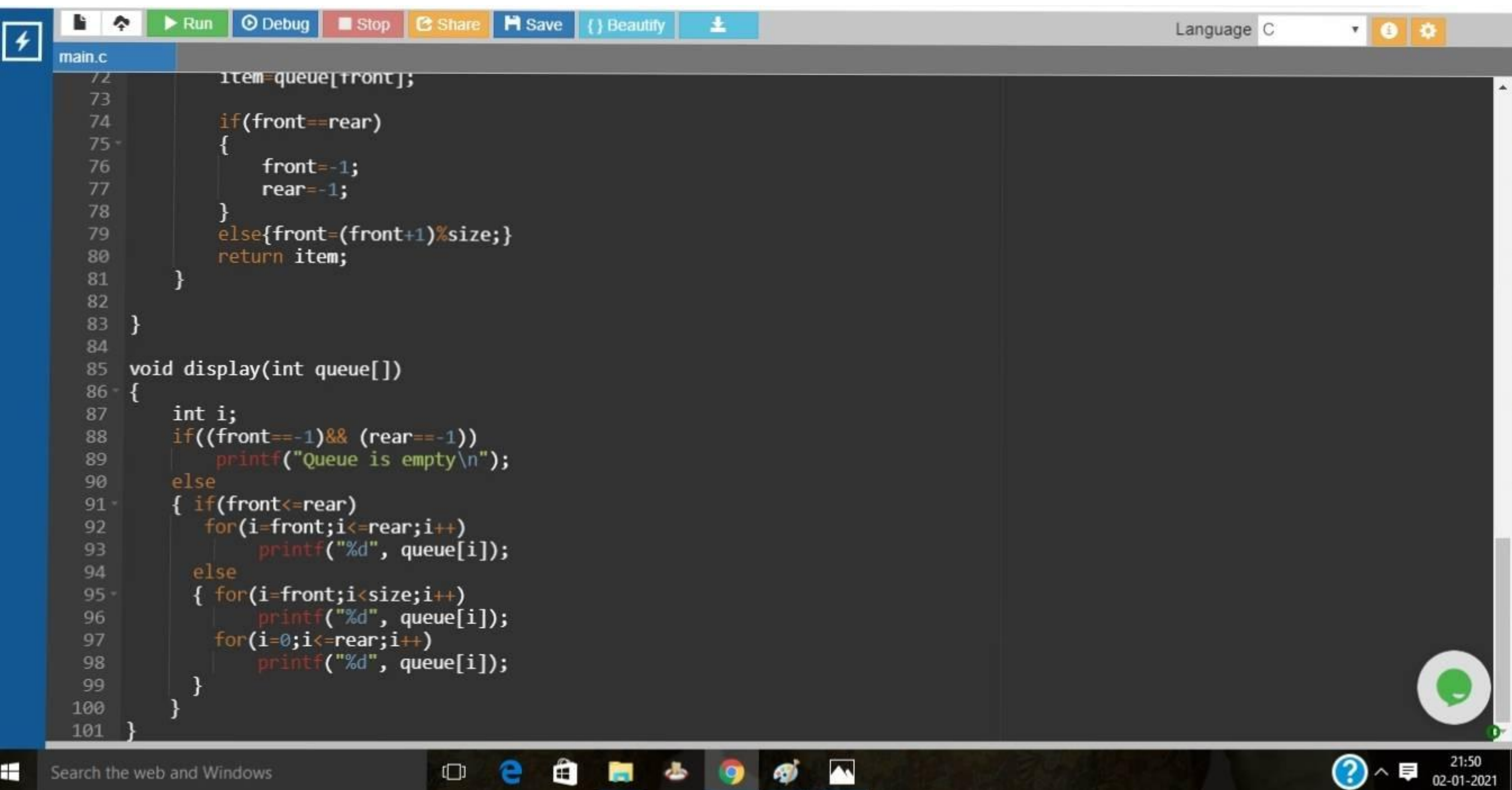


The image shows a code editor window with a dark theme. The editor has a toolbar at the top with buttons for Run, Debug, Stop, Share, Save, Beautify, and a download icon. The language is set to C. The code is in a file named main.c and implements a queue with insert and delete functions. The delete function uses a switch statement to handle different cases. The insert function checks for overflow and full conditions. The Windows taskbar is visible at the bottom with various application icons and the system clock showing 21:48 on 02-01-2021.

```
37         case 2: item=delete(queue);
38                 if(item==-9999)
39                     printf("Queue undreflow\n");
40                 else
41                     printf("Removed element: %d",item);
42                 break;
43         case 3: display(queue);
44                 break;
45         case 4: exit(0);
46     }
47 } while (ch!=4);
48 return 0;
49 }
50
51 void insert(int ele,int queue[])
52 {
53     if ((rear+1)%size==front)
54         printf("Queue overflow\n");
55     else
56     {
57         rear=(rear+1)%size;
58         queue[rear]=ele;
59         if ((rear+1)%size==front)
60             printf("Queue is full\n");
61         if(front ==-1)
62             front=0;
63     }
64 }
65 int delete(int queue[])
```



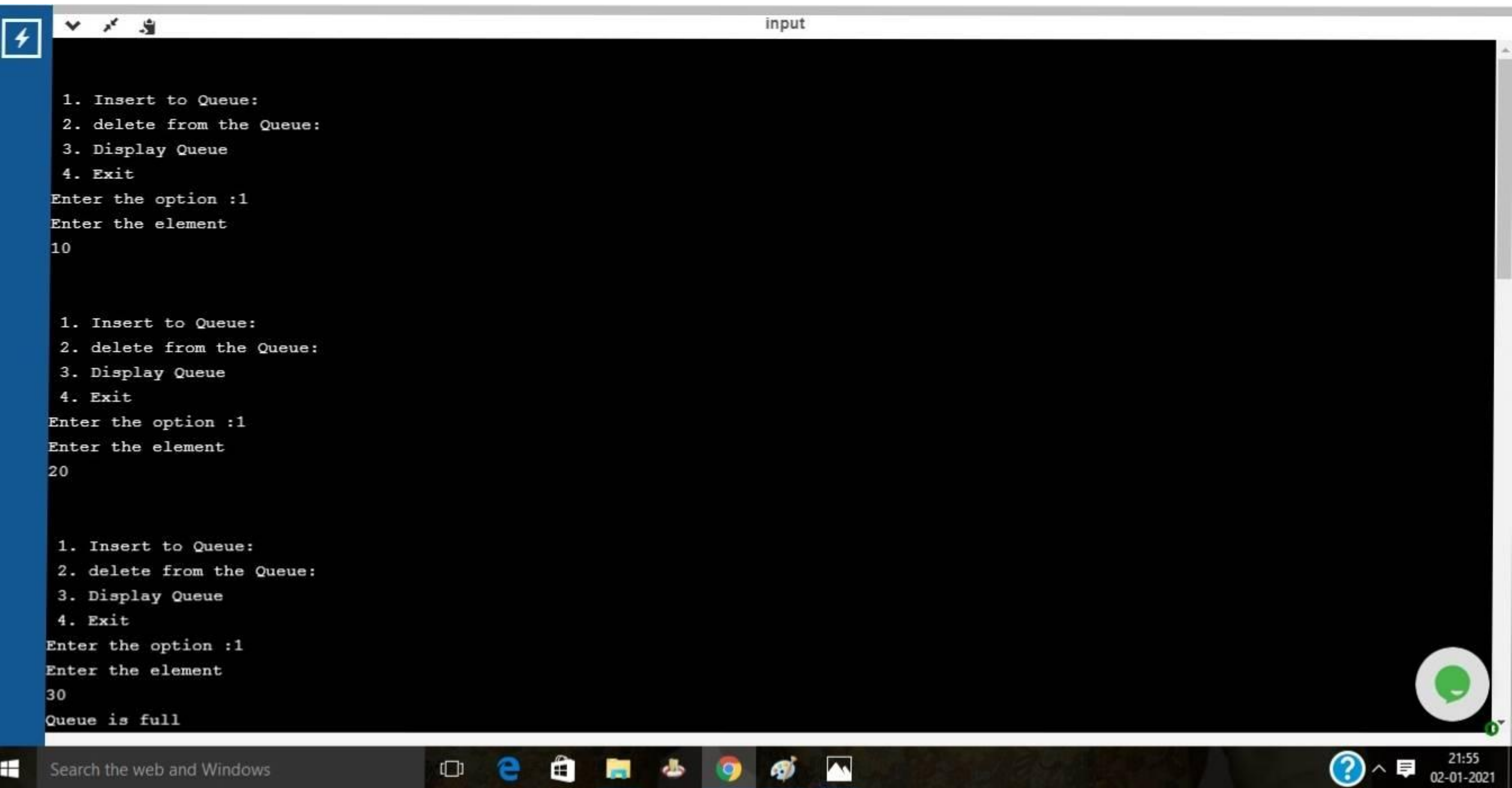
```
65 int delete(int queue[])
66 {
67     int item;
68     if(front == -1)
69         return -9999;
70     else
71     {
72         item=queue[front];
73
74         if(front==rear)
75         {
76             front=-1;
77             rear=-1;
78         }
79         else{front=(front+1)%size;}
80         return item;
81     }
82 }
83
84
85 void display(int queue[])
86 {
87     int i;
88     if((front==-1)&& (rear==-1))
89         printf("Queue is empty\n");
90     else
91     { if(front<=rear)
92         for(i=front;i<=rear;i++)
93             printf("%d", queue[i]);
94     }
```

```
main.c
72     item=queue[front];
73
74     if(front==rear)
75     {
76         front=-1;
77         rear=-1;
78     }
79     else{front=(front+1)%size;}
80     return item;
81 }
82
83 }
84
85 void display(int queue[])
86 {
87     int i;
88     if((front==-1)&& (rear==-1))
89         printf("Queue is empty\n");
90     else
91     { if(front<=rear)
92         for(i=front;i<=rear;i++)
93             printf("%d", queue[i]);
94         else
95         { for(i=front;i<size;i++)
96             printf("%d", queue[i]);
97           for(i=0;i<=rear;i++)
98             printf("%d", queue[i]);
99         }
100     }
101 }
```

Search the web and Windows

21:50
02-01-2021



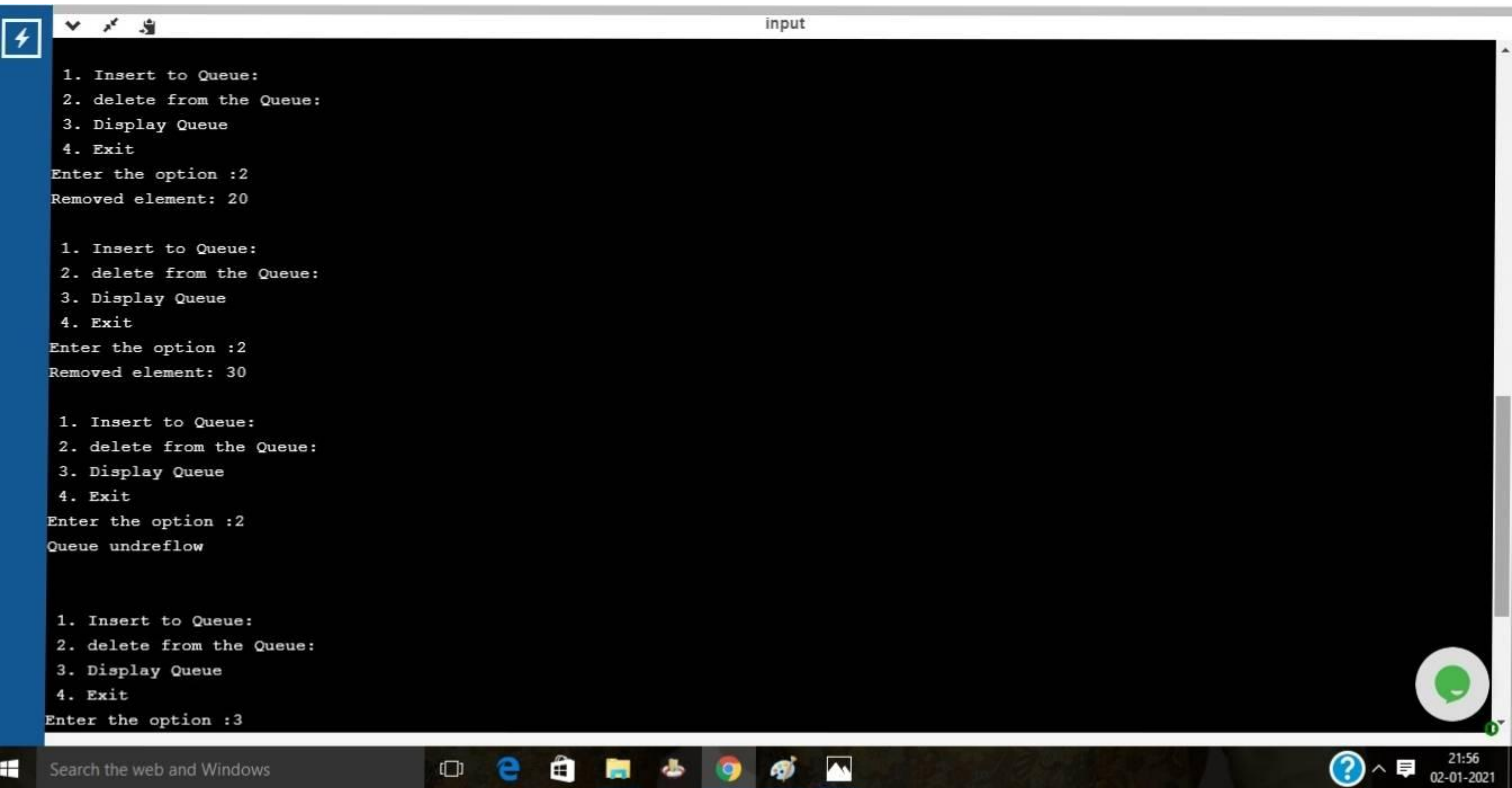
```
input
30
Queue is full

1. Insert to Queue:
2. delete from the Queue:
3. Display Queue
4. Exit
Enter the option :3
102030

1. Insert to Queue:
2. delete from the Queue:
3. Display Queue
4. Exit
Enter the option :2
Removed element: 10

1. Insert to Queue:
2. delete from the Queue:
3. Display Queue
4. Exit
Enter the option :2
Removed element: 20

1. Insert to Queue:
2. delete from the Queue:
3. Display Queue
```




```
input
Enter the option :2
Removed element: 30

1. Insert to Queue:
2. delete from the Queue:
3. Display Queue
4. Exit
Enter the option :2
Queue undreflow

1. Insert to Queue:
2. delete from the Queue:
3. Display Queue
4. Exit
Enter the option :3
Queue is empty

1. Insert to Queue:
2. delete from the Queue:
3. Display Queue
4. Exit
Enter the option :4

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