

## main.cpp

```
1 #include <iostream>
2 using namespace std;
3 struct Node {
4     int data;
5     struct Node *prev;
6     struct Node *next;
7 };
8 struct Node* head = NULL;
9 void insert(int newdata) {
10     struct Node* newnode = (struct Node*) malloc(sizeof(struct
11         newnode->data = newdata;
12         newnode->prev = NULL;
13         newnode->next = head;
14         if(head != NULL)
15             head->prev = newnode ;
16         head = newnode;
17 }
18 void display() {
19     struct Node* ptr;
20     ptr = head;
21     while(ptr != NULL) {
22         cout<< ptr->data << " ";
23         ptr = ptr->next;
24     }
25 }
26 int main() {
27     insert(3);
28     Insert(1);
29     Insert(7);
30     Insert(2);
31     Insert(9);
32     cout<< "The doubly linked list is: ";
33     display();
34     return 0;
}
```

```
60 using namespace std;
61 int q[SIZE], front=0, rear=0;
62 int main()
63 {
64     int ch;
65     void enqueue();
66     void dequeue();
67     void display();
68
69     while(1)
70     {
71         cout<<"\n 1. add element";
72         cout<<"\n 2. remove element";
73         cout<<"\n 3. display"; ]
74         cout<<"\n 4.exit";
75         cout<<"\n enter your choice";
76         cin>>ch;
77
78         switch(ch)
79         {
80             case 1:
81                 enqueue();
82                 break;
83                 cout<<"queue is enqueued";
84             case 2:
85                 {
86                     if(front==0)
87                         cout<<"queue is empty";
88                 }
89                 dequeue();
90                 break;
91             case 3:
92                 {
93                     if(front==0)
94                         cout<<"queue is empty";
95                     else
96                         display();
97                 }
98                 break;
99             case 4:
100                exit(0);
101        }
102    }
103 }
```

### main.cpp

```
1 #include<iostream>
2 #include<conio.h>
3 #include<stdlib.h>
4 #define SIZE 5
5 using namespace std;
6 int q[SIZE],front=0,rear=0;
7 int main()
8 {
9     #include<iostream>
10    #include<conio.h>
11    #include<stdlib.h>
12    #define SIZE 5
13    using namespace std;
14    int q[SIZE],front=0,rear=0;
15    int main()
16    {
17        int ch;
18        void enqueue();
19        void dequeue();
20        void display();
21
22        while(1)
23        {
24            cout<<"\n 1. add element";
25            cout<<"\n 2. remove element";
26            cout<<"\n 3. display";
27            cout<<"\n 4. exit";
28            cout<<"\n enter your choice:";
29            cin>>ch;
30
31            switch(ch)
32            {
33                case 1:
34                    enqueue();
35                    break;
36
37                int ch;
38                void enqueue();
39                void dequeue();
40                void display();
41
42                while(1)
43                {
44                    cout<<"\n 1. add element";
45                    cout<<"\n 2. remove element";
46                    cout<<"\n 3. display";
47                    cout<<"\n 4. exit";
48                    cout<<"\n enter your choice:";
49                    cin>>ch;
50
51                    switch(ch)
52                    {
53                        case 1:
54                            enqueue();
55                            break;
56
57                        case 2:
58                            dequeue();
59                            break;
60
61                        case 3:
62                            display();
63                            break;
64
65                        case 4:
66                            exit(0);
67                            break;
68
69                    }
70                }
71            }
72        }
73    }
74}
```

```
34     cout<<endl;
35 }
36 int main() {
37     int ch, val;
38     cout<<"1) Push in stack"<<endl;
39     cout<<"2) Pop from stack"<<endl;
40     cout<<"3) Display stack"<<endl;
41     cout<<"4) Exit"<<endl;
42     do {
43         cout<<"Enter choice: "<<endl;
44         cin>>ch;
45         switch(ch) {
46             case 1: {
47                 cout<<"Enter value to be pushed:"<<endl;
48                 cin>>val;
49                 push(val);
50                 break;
51             }
52             case 2: {
53                 pop();
54                 break;
55             }
56             case 3: {
57                 display();
58                 break;
59             }
60             case 4: {
61                 cout<<"Exit"<<endl;
62                 break;
63             }
64             default: {
65                 cout<<"Invalid Choice"<<endl;
66             }
67         }
68     }while(ch !=4);
69     return 0;
70 }
```

## main.cpp

```
1 #include <iostream>
2 using namespace std;
3 struct Node {
4     int data;
5     struct Node *next;
6 };
7 struct Node* top = NULL;
8 void push(int val) {
9     struct Node* newnode = (struct Node*) malloc(sizeof(struct Node));
10    newnode->data = val;
11    newnode->next = top;
12    top = newnode;
13 }
14 void pop() {
15     if (top == NULL)
16         return;
```