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1:  /*-----Doubly Connected Linklist-----*/
2:
3:  #include<iostream>
4:  using namespace std;
5:
6:  struct node
7:  {
8:      int data;
9:
10:     node *next;
11:     node *prev;
12: };
13:
14: class dLinkedList
15: {
16:     private:
17:         node *head;
18:         node *tail;
19:     public:
20:         dLinkedList()
21:         {
22:             head = NULL;
23:             tail = NULL;
24:         }
25:         void addFront(int n)
26:         {
27:             node *temp = new node;
28:             temp -> data = n;
29:             temp -> prev = NULL;
30:             temp -> next = NULL;
31:
32:             if(head == NULL)
33:             {
34:                 head = tail = temp;
35:             }
36:             else
37:             {
38:                 temp -> next = head;
39:                 head -> prev = temp;
40:                 head = temp;
41:             }
42:
43:         }
44:
45:         void addBack(int n)
46:         {

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47:         node *temp = new node;
48:         temp -> data = n;
49:         temp -> prev = NULL;
50:         temp -> next = NULL;
51:
52:         if(tail == NULL)
53:         {
54:             head = tail = temp;
55:         }
56:         else
57:         {
58:             temp -> prev = tail;
59:             tail -> next = temp;
60:             tail = temp;
61:         }
62:     }
63:
64:     void showList()
65:     {
66:         node *temp = new node;
67:         temp = head;
68:         while(temp != NULL)
69:         {
70:             cout << temp -> data << " ";
71:             temp = temp -> next;
72:         }
73:
74:     }
75: };
76:
77: int main()
78: {
79:     dLinkedList list1;
80:     list1.addFront(2);
81:     list1.addFront(1);
82:     list1.addBack(3);
83:     list1.addBack(4);
84:
85:     list1.showList();
86:
87:     return 0;
88: }

```