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1: /*
2:  * C++ Program to Implement Queue using Linked List
3:  */
4: #include<iostream>
5: #include<stdio.h>
6: #include<conio.h>
7: using namespace std;
8: struct node
9: {
10:     int data;
11:     node *next;
12: } *front = NULL, *rear = NULL, *p = NULL, *np = NULL;
13: void push(int x)
14: {
15:     np = new node;
16:     np->data = x;
17:     np->next = NULL;
18:     if(front == NULL)
19:     {
20:         front = rear = np;
21:         rear->next = NULL;
22:     }
23:     else
24:     {
25:         rear->next = np;
26:         rear = np;
27:         rear->next = NULL;
28:     }
29: }
30: int remove()
31: {
32:     int x;
33:     if(front == NULL)
34:     {
35:         cout << "empty queue\n";

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36:     }
37:     else
38:     {
39:         p = front;
40:         x = p->data;
41:         front = front->next;
42:         delete(p);
43:         return(x);
44:     }
45: }
46: int main()
47: {
48:     int n, c = 0, x;
49:     cout << "Enter the number of values to be pushed into queue\n";
50:     cin >> n;
51:     while (c < n)
52:     {
53:         cout << "Enter the value to be entered into queue\n";
54:         cin >> x;
55:         push(x);
56:         c++;
57:     }
58:     cout << "\n\nRemoved Values\n\n";
59:     while(true)
60:     {
61:         if (front != NULL)
62:             cout << remove() << endl;
63:         else
64:             break;
65:     }
66:     getch();
67: }

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