8/2/24, 5:12 PM Course

```
C DoubleLL6.c 8 C DelAtEnd... 8
                                                                                 Submit
                                                                                             Debugger
        struct · node · {
 2
             int ⋅ data;
             struct · node · * prev;
 3
 4
             struct · node · * next;
 5
        };
 6
        typedef · struct · node · * · NODE;
 7
 8
      NODE · createNodeInDLL() · {
 9
             NODE · temp;
             temp · = · (NODE)malloc(sizeof(struct · node));
10
             temp->prev·=·NULL;
11
             temp->next ·= · NULL;
12
             return · temp;
13
14
        }
15
16
        NODE · insertAtEndInDLL(NODE · first, · int · x) ·
17
      v {
             NODE · temp · = · first;
18
19
             NODE · temp2 · = · createNodeInDLL();
20
21
             temp2->data\cdot = \cdot x;
22
23
             if( · temp · == · NULL)
24
25
                  return · temp2;
26
             }
27
             while( ·temp->next ·! = ·NULL)
28
29
             {
                  temp·=·temp->next;
30
31
             }
32
33
             temp->next ·= · temp2;
34
             temp2->prev·=·temp;
35
36
             return first;
37
        }
38
39
        NODE · deleteAtEndInDLL(NODE · first)
40
      v {
             NODE · temp · = · first;
41
42
43
             int ⋅x;
                                                                < Prev
                                                                        Reset
                                                                                Submit
                                                                                         Next >
```

```
if( ·temp->next · == ·NULL · )
45
46
             {
47
                 x·=·temp->data;
                 printf("The deleted element from DLL: %d\n", x);
48
                 return · NULL;
49
50
             }
51
52
             while( ·temp->next->next ·!=NULL ·)
53
54
                 temp ·= · temp -> next;
55
             }
56
57
             x \cdot = \cdot temp - \cdot next - \cdot data;
58
59
             temp->next -= NULL;
60
61
             printf("The deleted element from DLL: %d\n", x);
62
63
             return · first;
64
65
66
        }
67
68
        void·traverseListInDLL(NODE·first) · {
69
             NODE · lastNode · = · first;
70
             while · (lastNode · ! = · NULL) · {
71
                 printf("%d <<--> .", .lastNode .-> .data);
72
                 lastNode · = · lastNode · - > · next;
73
74
             }
75
             printf("NULL\n");
        }
76
77
78
 > Terminal
               ⊞ Test cases
```