8/2/24, 6:18 PM Course

```
SingleLL4.c S | C InsAtPosi... 8
                                                                                       Submit
                                                                                                    Debugger
        struct · node · {
 2
              int ⋅ data;
 3
              struct · node · * next;
 4
         };
 5
         typedef · struct · node · *NODE;
 6
      NODE · createNode() · {
 7
              NODE · temp;
 8
              temp · = · (NODE) · malloc(sizeof(struct · node));
 9
              temp \cdot - > \cdot \text{next} \cdot = \cdot \text{NULL};
              return · temp;
10
         }
11
12
13
         NODE · insertAtPosition(NODE · first, · int · pos, · int · x) ·
14
      √ {
15
              if(pos \cdot \langle = \cdot 0)
              {
16
                   printf("No·such·position·in·SLL·so·inserton·is·not·
17
         possible\n");
18
19
                   return first;
20
              }
21
              int ⋅ i;
22
23
              NODE · temp, prevpos · = · first · , · last · = · first;
24
25
              for(int\cdoti\cdot=\cdot1\cdot;\cdoti<·pos\cdot;i++\cdot)
26
27
28
                    if(last ·== · NULL)
29
                    {
                         printf("No·such·position·in·SLL·so·insertion·is·not·
30
31
         possible\n");
32
                         return first;
33
34
                   prevpos · = · last;
                    last -= · last -> next;
35
36
              }
37
38
              temp · = · createNode();
              temp->data·=x;
39
              if(\cdot pos \cdot == 1 \cdot)
40
41
                   temp->next ·= · first;
42
43
                   first = · temp;
                                                                    < Prev
                                                                             Reset
                                                                                     Submit
                                                                                               Next >
```

```
45
46
47
48
            else
49
            {
50
                temp->next -= · prevpos->next;
51
                prevpos->next -= -temp;
52
            }
53
54
            return first;
55
     v }
56
57
58
       void·traverseList(NODE·first)·
59
       {
            NODE ⋅ temp;
60
            temp·=·first;
61
62
            while(temp ·! = ·NULL)
63
                printf("%d·-->·"·,·temp->data);
64
                temp·=·temp->next;
65
66
            printf("NULL\n");
67
       }
68
69
 > Terminal
              ⊞ Test cases
```