```c
#include <stdio.h>
#include <stdlib.h>

struct node {
    int key;
    struct node *link;
};

void displayList(struct node * start){
    struct node *p;
    p = start;
    printf("\n");
    if (checkEmpty(p)){
        printf("List is Empty.");
    }
    else{
        while (p != NULL){
            printf("%d  ", p->key);
            p = p->link;
        }
    }
}

int checkEmpty(struct node * start){
    struct node *p;
    p = start;
```

```
27:     if (p == NULL){
28:         return 1;
29:     }
30:     else {
31:         return 0;
32:     }
33: }
34:
35: int lengthOfList(struct node * start){
36:     int count = 0;
37:     struct node *p;
38:     p = start;
39:     if (checkEmpty(p)){
40:         return 0;
41:     }
42:     while (p != NULL){
43:         count++;
44:         p = p->link;
45:     }
46:     return count;
47: }
48:
49: void displayLength(int length){
50:     printf("Length of LinkedList is : %d", leng
51: }
52:
```

```
53: void main(){
54:     struct node *head = NULL;
55:     struct node *second;
56:     struct node *third;
57:
58:     head = (struct node *)malloc (sizeof(struct
59:     second = (struct node *)malloc (sizeof(stru
60:     third = (struct node *)malloc (sizeof(struc
61:
62:     head->key = 7;
63:     head->link = second;
64:
65:     second->key = 11;
66:     second->link = third;
67:
68:     third->key = 87;
69:     third->link = NULL;
70:
71:     displayLength(lengthOfList(head));
72:     displayList(head);
73: }
```