



main.c

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  struct Node{
5      int data;
6      struct Node*next;
7  };
8
9  struct Node* top = NULL;
10
11 void linkedListTraversal(struct Node *ptr)
12 {
13     while (ptr != NULL)
14     {
15         printf("%d\t", ptr->data);
16         ptr = ptr->next;
17     }
18 }
19
20 int isEmpty(struct Node* top){
21     if (top==NULL){
22         return 1;
23     }
24     else{
25         return 0;
26     }
27 }
28
29 int isFull(struct Node* top){
30     struct Node* p = (struct Node*)malloc(sizeof(struct Node));
31     if(p==NULL){
32         return 1;
33     }
34     else{
35         return 0;
36     }
37 }
38 struct Node* push(struct Node* top, int x){
39     if(isFull(top)){
40         printf("Stack Overflow\n");
41     }
42     else{
43         struct Node* n = (struct Node*) malloc(sizeof(struct Node));
44         n->data = x;
45         n->next = top;
46         top = n;
47         return top;
48     }
```

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```
47     return top;
48 }
49 }
50
51 int pop(struct Node* tp){
52     if(isEmpty(tp)){
53         printf("Stack Underflow\n");
54     }
55     else{
56         struct Node* n = tp;
57         top = (tp)->next;
58         int x = n->data;
59         free(n);
60         return x;
61     }
62 }
63 void main()
64 {
65
66     top = push(top, 78);
67     top = push(top, 7);
68     top = push(top, 8);
69
70     int element = pop(top);
71     printf("Popped element is %d\n", element);
72     linkedListTraversal(top);
73 }
74
```



input

Popped element is 8

7 78

...Program finished with exit code 0

Press ENTER to exit console.