

main.c

```
1  #include<stdio.h>
2  #include<stdlib.h>
3  typedef struct node
4  {
5      int data;
6      struct node * next;
7  }
8  node;
9  void insertnode(node** head, int data)
10 {
11     node * newnode = (node*)malloc(sizeof(node));
12     newnode->data = data;
13     newnode->next = *head;
14     *head = newnode;
15 }
16 void printlist(node * head)
17 {
18     while(head)
19     {
20         printf("%d", head->data);
21         head = head->next;
22     }
23     printf("\n");
24 }
25 int main()
26 {
27     node* head = NULL;
28     insertnode(&head, 1);
29     insertnode(&head, 2);
30     insertnode(&head, 3);
31     printlist(head);
32     return 0;
33 }
```

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Share

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 typedef struct Node {
4     int data;
5     struct Node* next;
6     struct Node* prev;
7 } Node;
8 void insertNode(Node** head, Node** tail, int data) {
9     Node* newNode = (Node*) malloc(sizeof(Node));
10    newNode->data = data;
11    if (*head == NULL) {
12        *head = newNode;
13        *tail = newNode;
14    } else
15    {
16        (*tail)->next = newNode;
17        newNode->prev = *tail;
18        *tail = newNode;
19    }
20 }
21 void printListForward(Node* head)
22 {
23     while (head)
24     {
25         printf("%d ", head->data);
26         head = head->next;
27     }
28     printf("\n");
29 }
30 int main() {
31     Node* head = NULL;
32     Node* tail = NULL;
33     insertNode(&head, &tail, 1);
34     insertNode(&head, &tail, 2);
35     insertNode(&head, &tail, 3);
36     printListForward(head);
37     return 0;
38 }
```





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