

```

1  /* create element in link list and display the link list's elements*/
2  #include <stdio.h>
3  #include <conio.h>
4  #include <malloc.h>
5
6  int main()
7  {
8      struct node
9      {
10         int num;
11         struct node *next;
12     }*start = NULL;
13
14     typedef struct node NODE;
15     NODE *p, *q, *previous = NULL, *temp;
16     int count = 0;
17     char choice;
18     clrscr();
19     do
20     {
21         p= (NODE *) malloc (sizeof (NODE));
22         printf("enter the data item\n");
23         scanf("%d", &p -> num);
24         if(start == NULL)
25         {
26             //for node to be inserted at last
27             start = p;
28             start->next= NULL;
29             previous = start;
30             /* for node to be inserted in the beigning
31             p->next = start;
32             start = p; */
33         }
34         else
35         {
36             //for node to be inserted at last
37             previous->next = p;
38             p->next = NULL;
39             previous = p;
40             /* for node to be inserted in the beginning
41             q = start;
42             p->next = q;
43             start = p;
44             */
45         }
46         printf("\nDo you want to continue (type y or n)?\n");
47         scanf("%s", &choice);
48     }while(choice=='y' || choice=='Y');
49
50     int delets = 0;
51     char del;
52     do
53     {
54         if(delets){
55             /* //delets first element. */
56             if(start != NULL){
57                 temp = start;
58                 start = temp->next;
59                 printf("\ndeleted node is %d ",temp->num);
60                 count = 0;
61                 free(temp);
62             }
63             // */
64         }
65         /* //delets last node
66         temp = start;
67         if(start == NULL)
68             printf("\nlist is empty");

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67     else if(temp->next == NULL) //only one node in the list
68     {
69         printf("\ndeleted item is %d", temp->num);
70         free(temp);
71         start = NULL;
72         count = 0;
73     }
74     else
75     {
76         while( temp->next->next != NULL)
77             temp=temp->next;
78         printf("the deleted node is %d\n", temp->next->num);
79         free(temp->next);
80         temp->next = NULL;
81         count = 0;
82     }
83     */
84 }
85
86 temp = start;
87 if(temp != NULL)
88     printf("status of the linked list is \n");
89 while(temp != NULL)
90 {
91     printf(" %d ", temp->num);
92     count ++;
93     temp = temp->next;
94 }
95 printf("\nno of nodes in the list = %d \n", count);
96
97 printf("\n Do you want to delete node? type y or n\n");
98 scanf("%s", &del);
99 delets = 1;
100
101 }while(del=='y' || del=='Y');
102 getch();
103 return 0;
104 }
105

```