

/* C Program to Create a Linked List & Display the Elements in the List
This C Program creates a linked list & displays the elements in the list.
Linked list is an ordered set of data elements, each containing a link
to its successor. This program is to create a linked list and display
all the elements present in the created list.

C program to create a linked list and display the elements in the list
*/
#include <stdio.h>
#include <malloc.h>
#include <stdlib.h>

void main()
{
 struct node
 {
 int num;
 struct node *ptr;
 };
 typedef struct node NODE;
 NODE *head, *first, *temp = 0;

```
int count = 0;
int choice = 1;
first = 0;

while (choice)
{
    head = (NODE *)malloc(sizeof(NODE));
    printf("Enter the data item\n");
    scanf("%d", &head-> num);

    if (first != 0)
    {
        temp->ptr = head;
        temp = head;
    }
    else
        first = temp = head;

    fflush(stdin);

    printf("Do you want to continue(Type 0 or 1)?\n");
```

```
    scanf("%d", &choice);
}

temp->ptr = 0;

/* reset temp to the beginning */
temp = first;

printf("\n status of the linked list is\n");

while (temp != 0)
{
    printf("%d=>", temp->num);
    count++;
    temp = temp -> ptr;
}

printf("NULL\n");
printf("No. of nodes in the list = %d\n", count);
}
```