#include <stdio.h>

#include <stdlib.h>

struct node {

int num;

struct node \* nextptr;

}\*stnode;

struct node \*tail,\*p,\*q,\*store;

void ClListcreation(int n);

void ClListDeleteLastNode();

void displayClList(int a);

int main()

{

int n,num1,a,pos;

stnode = NULL;

printf("\n\n Circular Linked List : Delete node at the end of a circular linked list :\n");

printf("--------------------------------------------------------------------------------\n");

printf(" Input the number of nodes : ");

scanf("%d", &n);

ClListcreation(n);

a=1;

displayClList(a);

ClListDeleteLastNode();

a=2;

displayClList(a);

return 0;

}

void ClListcreation(int n)

{

int i, num;

struct node \*preptr, \*newnode;

if(n >= 1)

{

stnode = (struct node \*)malloc(sizeof(struct node));

printf(" Input data for node 1 : ");

scanf("%d", &num);

stnode->num = num;

stnode->nextptr = NULL;

preptr = stnode;

for(i=2; i<=n; i++)

{

newnode = (struct node \*)malloc(sizeof(struct node));

printf(" Input data for node %d : ", i);

scanf("%d", &num);

newnode->num = num;

newnode->nextptr = NULL; // next address of new node set as NULL

preptr->nextptr = newnode; // previous node is linking with new node

preptr = newnode; // previous node is advanced

}

preptr->nextptr = stnode; //last node is linking with first node

}

}

void ClListDeleteLastNode()

{

p=stnode;

while(p->nextptr!=stnode)

{

q=p;

p=p->nextptr;

}

q->nextptr=stnode;

printf("\n The deleted node is : %d",p->num);

free(p);

}

void displayClList(int m)

{

struct node \*tmp;

int n = 1;

if(stnode == NULL)

{

printf(" No data found in the List yet.");

}

else

{

tmp = stnode;

if (m==1)

{

printf("\n Data entered in the list are :\n");

}

else

{

printf("\n After deletion the new list are :\n");

}

do {

printf(" Data %d = %d\n", n, tmp->num);

tmp = tmp->nextptr;

n++;

}while(tmp != stnode);

}

}