#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

struct node

{

int collcode;

char collname[20];

struct node \*next;

};

struct node \*ptr1,\*ptr2,\*start=NULL;

void create(int n)

{

int i;

for(i=0;i<n;i++)

{

ptr1=start->next;

if(start==NULL)

{

ptr1=(struct node\*)malloc(sizeof(struct node));

printf("Enter college code and its name:\n");

scanf("%d %s",&ptr1->collcode,&ptr1->collname);

start=ptr1;

start->next=NULL;

}

else if(ptr1==NULL)

{

ptr1=(struct node\*)malloc(sizeof(struct node));

printf("Enter college code and its name:\n");

scanf("%d %s",&ptr1->collcode,&ptr1->collname);

start->next=ptr1;

ptr1->next=start;

}

else

{

for(ptr1=start->next;ptr1->next!=start;ptr1=ptr1->next);

ptr2=(struct node\*)malloc(sizeof(struct node));

printf("Enter college code and its name:\n");

scanf("%d %s",&ptr2->collcode,&ptr2->collname);

ptr1->next=ptr2;

ptr2->next=start;

}

}

}

void insertbeg()

{

for(ptr2=start->next;ptr2->next!=start;ptr2=ptr2->next);

ptr1=(struct node\*)malloc(sizeof(struct node));

printf("Enter college code and its name:\n");

scanf("%d %s",&ptr1->collcode,&ptr1->collname);

ptr1->next=start;

start=ptr1;

ptr2->next=ptr1;

printf("done\n");

}

void delend()

{

if(start==NULL)

printf("The list is empty\n");

else if(start->next==NULL)

free(start);

else

{

for(ptr1=start->next;ptr1->next!=start;ptr1=ptr1->next)

ptr2=ptr1;

ptr2->next=start;

free(ptr1);

}

}

void printlist()

{

if(start==NULL)

printf("The circular list is empty\n");

else

{

printf("The college code is:%d\n",start->collcode);

printf("The college name is:%s\n",start->collname);

if(start->next!=NULL)

{

for(ptr1=start->next;ptr1!=start;ptr1=ptr1->next)

{

printf("The college code is:%d\n",ptr1->collcode);

printf("The college name is:%s\n",ptr1->collname);

}

}

}

}

void main()

{

int n,c;

char ans;

clrscr();

printf("Enter number of entries for the circular list\n");

scanf("%d",&n);

create(n);

do

{

printf("1.Insert in begining\n");

printf("2.Delete in the end\n");

printf("3.Print the circular list\n");

scanf("%d",&c);

switch(c)

{

case 1:

insertbeg();

break;

case 2:

delend();

break;

case 3:

printlist();

break;

default:

printf("Invalid choice\n");

}

printf("Do you want to continue\n");

fflush(stdin);

scanf("%c",&ans);

}while(ans=='y'||ans=='Y');

getch();

}