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//022

//EXP-6 CIRCULAR LINKED LIST

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

struct node

{

int info;

struct node \*next;

}

\*head=NULL;

int s=0;

void add(int item)

{

struct node \*temp;

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

if(head==NULL)

{

temp->info=item;

head=temp;

temp->next=head;

s++;

return;

}

temp->info=item;

temp->next=head->next;

head->next=temp;

s++;

}

void addatend(int item)

{

struct node\* temp;

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

if(head==NULL)

{add(item);

return;

}

temp->info=item;

temp->next=head->next;

head->next=temp;

head=temp;

s++;

}

void deletion(int item)

{

struct node \*c=head,\*pre;

if(head==NULL)

{

printf("UNDERFLOW");

}

while(c->info!=item)

{

if(c->next==head)

{printf("/n");

printf("NODE NOT FOUND");

break;}

pre=c;

c=c->next;

}

if(c->next==head)

{

head=NULL;

free(c);

return;

}

if(c==head)

{

pre=head;

while(pre->next!=head)

{

pre=pre->next;

}

head=c->next;

pre->next=head;

free(c);

}

else

if(c->next==head)

{

pre->next=head;

free(c);

}

else

{

pre->next=c->next;

free(c);

}

s--;

}

void display()

{

struct node \*temp=head->next;

printf("\n\n");

do{

printf("%d ",temp->info);

temp=temp->next;

}

while(temp!=head->next);

}

void main()

{

int i;

clrscr();

for(i=1;i<=5;i++)

{

add(i);}

display();

addatend(7);

display();

add(8);

display();

addatend(9);

display();

deletion(4);

display();

printf("\n");

printf("SIZE IS:%d",--s);

getch();

}

/\*

5 4 3 2 1

5 4 3 2 1 7

8 5 4 3 2 1 7

8 5 4 3 2 1 7 9

8 5 3 2 1 7 9

SIZE IS:6

\*/