**Practical no. 6**

AIM-To write a program to implement Stack using Linked List

PROGRAM-

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

struct node

{

int data;

struct node \*next;

}\*n,\*top,\*x;

struct node\* push()

{

int dt;

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

printf("Enter element data:");

scanf("%d",&dt);

t->data=dt;

t->next=top;

top=t;

return top;

}

struct node\* pop()

{

x=top;

top=top->next;

free(x);

return x;

}

void disp()

{

for(x=top;x->next!=NULL;x=x->next)

printf("\n%d",x->data);

printf("\n%d",x->data);

}

void main()

{

int ch,o=1;

do

{

printf("\nMENU\n1.Push\n2.Pop\n3.Display\n");

printf("Enter option:");

scanf("%d",&ch);

switch(ch)

{

case 1: top=push();

disp();

break;

case 2: x=pop();

printf("Element deleted is:%d\n",x->data);

disp();

break;

case 3: disp();

break;

}

printf("\nEnter 1 to continue:");

scanf("%d",&o);

}while(o==1);

getch();

}

OUTPUT-

MENU

1.Push

2.Pop

3.Display

Enter choice:1

Enter element data:12

12

Enter 1 to continue:1

MENU

1.Push

2.Pop

3.Display

Enter choice:1

Enter element data:13

13

12

Enter 1 to continue:1

MENU

1.Push

2.Pop

3.Display

Enter choice:2

Element deleted is:13

12

Enter 1 to continue:0