//Stack Using Linked List

//20UET009

#include<stdio.h>

#include<stdlib.h>

struct node

{

int data;

struct node \*next;

};

struct node \*creatnode()

{

struct node \*p;

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

return p;

}

int main()

{

struct node \*top,\*p;

top=NULL;

int i,j,c;

while(c!=4)

{

printf("\npush:1 pop:2 display:3 exit:4\n");

printf("enter choice:\n");

scanf("%d",&c);

switch(c)

{

case 1:

p=creatnode();

printf("push operation\n");

printf("enter node data\n");

scanf("%d",&p->data);

if(top==NULL)

{

p->next=NULL;

top=p;

}

else

{

p->next=top;

top=p;

}

break;

case 2:

printf("pop opration\n");

if(top!=NULL)

{

p=top;

top=top->next;

p->next=NULL;

printf("popped iteam is %d\n",p->data);

free(p);

}

else

{

printf("stack is empty\n");

}

break;

case 3:

printf("display operation\n");

if(top!=NULL)

{

p=top;

while(p!=NULL)

{

printf("%d ",p->data);

p=p->next;

}

}

else

{

printf("stack is empty\n");

}

break;

case 4:

break;

default:

printf("invalid choice\n");

}

}

return 0;

}

