#include<stdio.h>

struct stack

{

int a[20];

int top;

}s;

void push(int x)

{

if(s.top==20)

printf("Stack full");

else

{

s.top++;

s.a[s.top]=x;

printf("\n\tData is added to stack\n");

}

}

void pop()

{

int x;

if(s.top==-1)

{

printf("\n\tStack empty");

}

else

{

printf("\n\tThe deleted data is %d",s.a[s.top]);

s.top--;

}

}

void show()

{

int i;

if(s.top==-1)

{

printf("\nStack Empty");

}

else

{

printf("\nThe stack elements");

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

for(i=0;i<=s.top;i++)

printf("%d\t",s.a[i]);

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

}

}

void main()

{

int ch,data;

s.top=-1;

do

{

printf("\n\t\t\t Menu");

printf("\n\t\t1->Push");

printf("\n\t\t2->Pop");

printf("\n\t\t3->List stack");

printf("\n\t\t4->Exit");

printf("\nEnter your choice:");

scanf("%d",&ch);

switch(ch)

{

case 1: printf("Enter the data:");

scanf("%d",&data);

push(data);

break;

case 2: pop();

break;

case 3: show();

break;

case 4: exit(0);

}

}while(ch<4);

getch();

}