#include <stdio.h>

#include <stdlib.h>

#define STACK\_SIZE 5

int item,top,st[10];

void push(){

if(top==STACK\_SIZE-1){

printf("\nSTACK OVERFLOW\n");

}

else{

top++;

st[top]=item;

}

}

void pop(){

int del\_item;

if(top==-1){

printf("\nSTACK UNDERFLOW\n");

}

else{

del\_item=st[top];

top--;

printf("\ndeleted item is %d\n",del\_item);

}

}

void display(){

int i;

if (top==-1){

printf("\nEMPTY\n");

}

else{

for(i=0; i<=top; i++){

printf("%d\n",st[i]);

}

}

}

void main(){

int x;

top=-1;

while(1)

{

printf("following operations can be done:\n");

printf("1 for push\n 2 for pop\n 3 for display\n");

scanf("%d",&x);

switch(x){

case 1:

printf("\nEnter value to be pushed: \n");

scanf("%d",&item);

push();

break;

case 2:

pop();

break;

case 3:

display();

break;

default:exit(0);

}

}

}