#include<stdio.h>

int s[100],choice,n,top,x,i;

void push();

void pop();

void display();

int main()

{

top=-1;

printf("\n Enter the size:");

scanf("%d",&n);

while(1)

{

printf("\n 1.Push \n 2.Pop\n 3.Display \n 4.Exit");

printf("\n Enter your choice : ");

scanf("%d", &choice);

switch(choice)

{

case 1: push();

break;

case 2: pop();

break;

case 3: display();

break;

case 4: exit (0);

default: printf("Wrong choice \n");

}

}

}

void push()

{

if(top>=n-1)

{

printf("\n Stack overflow");

}

else

{

printf(" Enter a value to be pushed:");

scanf("%d",&x);

top++;

s[top]=x;

}

}

void pop()

{

if(top<=-1)

{

printf("\n Stack underflow");

}

else

{

printf("\n The popped elements is %d",s[top]);

top--;

}

}

void display()

{

if(top>=0)

{

printf("\n The elements in stack \n");

for(i=top; i>=0; i--)

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

}

else

{

printf("\n The stack is empty");

}

}

