**#include <stdio.h>**

**#define SIZE 30**

**int stack[SIZE];**

**int top=-1;**

**void push()**

**{**

**if(top==SIZE-1)**

**printf("Stack overflow.");**

**else**

**{**

**top=top+1;**

**printf("Enter the element that you would like to insert into the stack ");**

**scanf("%d",&stack[top]);**

**printf("The element inserted successfully.");**

**}**

**}**

**void pop()**

**{**

**if(top==-1)**

**printf("Stack underflow.");**

**else**

**{**

**printf("The element %d is popped.",stack[top]);**

**top=top-1;**

**}**

**}**

**void display()**

**{**

**int run;**

**if(top==-1)**

**printf("Stack underflow.");**

**else**

**{**

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

**for(run=top;run>=0;run--)**

**printf("%d\n",stack[run]);**

**printf("-----");**

**}**

**}**

**void main()**

**{**

**while(1)**

**{**

**int ch;**

**printf("Enter 1 to push, 2 to pop, 3 to display the elements and 4 to exit ");**

**scanf("%d",&ch);**

**printf("\n");**

**if(ch==1)**

**push();**

**else if(ch==2)**

**pop();**

**else if(ch==3)**

**display();**

**else if(ch==4)**

**break;**

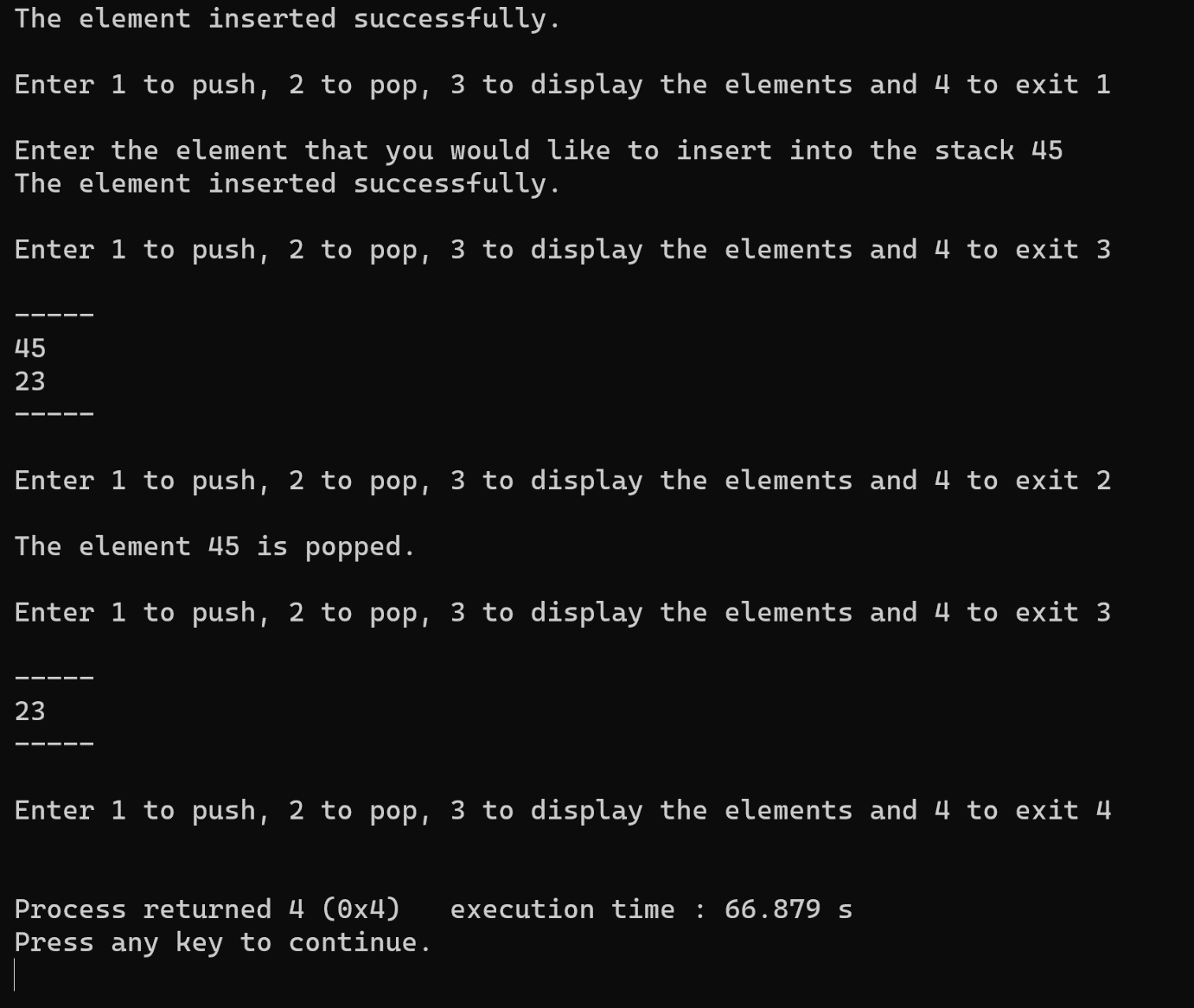
**else**

**printf("Invalid input.");**

**printf("\n\n");**

**}**

**}**

****