

bits 32

extern \_printf

global \_afisareASM

segment data public data use32

format db "%d ",0

sir1 times 10 dd 0

segment code public code use32

\_afisareASM:

push EBP

mov EBP,ESP

;pushad

;sub esp, 4 \* 3

;add ESP, 4\*1

mov ECX,[ESP+8]

mov ESI,[ESP+12]

lodsd

et1:

lodsd

push ECX

;printf("%d",EAX)

push EAX

push dword format

call \_printf

add ESP,4\*2

pop ECX

loop et1

mov EAX,0

;popad

mov ESP,EBP

pop EBP

ret

```
#include <stdio.h>
#include <stdlib.h>

int v[50];
int N[50];
int P[50];

int afisareASM(int n,int v[]);

int main() {
    FILE* f=fopen("numere.txt","r");

    int x;
    int ln=0;
    while(fscanf(f,"%d",&x)!=EOF){
        v[++ln]=x;
    }
    int n=0,p=0;
    for(int i=1; i<=ln; ++i){
        if(v[i]<0){
            N[++n]=v[i];
        } else {
            P[++p]=v[i];
        }
    }
    printf("Numere negative: ");
    afisareASM(n,N);
    printf("\n");
    printf("Numere pozitive: ");
    afisareASM(p,P);
    return 0;
}
```

```

14 _afisareASM:
15     push EBP
16     mov EBP,ESP
17     ;pushad
18
19     ;sub esp, 4 * 3
20
21     ;add ESP, 4*1
22
23     mov ECX,[ESP+8]
24     mov ESI,[ESP+12]
25
26     lodsd
27     etl:
28         lodsd
29         push ECX
30         ;printf("%d",EAX)
31         push EAX
32         push dword format
33         call _printf
34         add ESP,4*2
35         pop ECX
36     loop etl
37
38     mov EAX,0
39
40     ;popad
41     mov ESP,EBP
42     pop EBP
43     ret
44

```

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```

7
8 int afisareASM(int n,int v[]);
9
10 int main() {
11     FILE* f=fopen("numere.txt","r");
12
13     int x;
14     int ln=0;
15     while(fscanf(f,"%d",&x)!=EOF){
16         v[++ln]=x;
17     }
18     int n=0,p=0;
19     for(int i=1; i<=ln; ++i){
20         if(v[i]<0){
21             N[++n]=v[i];
22         } else {
23             P[++p]=v[i];
24         }
25     }
26     printf("Numere negative: ");
27     afisareASM(n,N);
28     printf("\n");
29     printf("Numere pozitive: ");
30     afisareASM(p,P);
31     return 0;

```

x86 Native Tools Command Prompt for VS 2017

```

main.c
main.c(8): error C2054: expected '(' to follow 'P'
main.c(8): error C2085: 'afisareASM': not in formal parameter list
main.c(10): error C2085: 'main': not in formal parameter list
main.c(10): error C2143: syntax error: missing ';' before '{'

C:\Users\Home\Desktop\asm_tools\npp\Lab12>cl main.c /link concat.obj
Microsoft (R) C/C++ Optimizing Compiler Version 19.16.27045 for x86
Copyright (C) Microsoft Corporation. All rights reserved.

main.c
main.c(29): error C2146: syntax error: missing ';' before identifier 'printf'

C:\Users\Home\Desktop\asm_tools\npp\Lab12>cl main.c /link concat.obj
Microsoft (R) C/C++ Optimizing Compiler Version 19.16.27045 for x86
Copyright (C) Microsoft Corporation. All rights reserved.

main.c
Microsoft (R) Incremental Linker Version 14.16.27045.0
Copyright (C) Microsoft Corporation. All rights reserved.

/out:main.exe
concat.obj
main.obj

C:\Users\Home\Desktop\asm_tools\npp\Lab12>main
Numere negative: -200 -63 -3
Numere pozitive: 123 298 1204 30203 0 35 403
C:\Users\Home\Desktop\asm_tools\npp\Lab12>

```