

Write a program that reads two integer numbers, computes their sum and prints it on the screen.

```
message_m1 db 'Give first', 0xd, 0xa, 0
message_m2 db 'Give second', 0xd, 0xa, 0
format_read db '%d; '
format_print db '%d + %d is %d: ', 0xd, 0xa, 0
m dd 0
n dd 0
r dd 0
```

push eax $\begin{cases} \rightarrow \text{mov}[sp], \text{eax} \\ \rightarrow \text{sub sp}, 4 \end{cases}$

pop eax $\begin{cases} \rightarrow \text{mov eax}, [sp] \\ \rightarrow \text{add sp}, 4 \end{cases}$

code segment:

push dword message_m1 ; push the address

call [print]

add esp, 4

push dword m

push dword format_read

call [scanf]

add esp, 2 * 4

push dword n

push dword message_m2

call [print]

add esp, 4

push dword m
push dword format_read
call [scanf]
add esp, 2*4

move eax, [m]
add eax, [m]

push eax
push dword [m]
push dword [m]
push dword format_print
call [printf]
add esp, 4*4

Seminar 5 4. ex 3 (closing and opening files)

To do: Write the pb. statement

```
extern fopen, fclose, fread, fwrite  
import fopen msvcrt.dll  
import fclose msvcrt.dll  
import fread msvcrt.dll  
import fwrite msvcrt.dll
```

data segment:

```
input_file db 'file.txt', 0  
input_mode db 'r', 0  
output_file db 'output.txt', 0  
output_mode db 'w', 0  
input_desc dd -1  
character db 0  
output_desc dd -1
```

code segment:

```
push dword input_mode  
push dword input_file  
call [fopen]  
add esp, 4*2
```

```
Cmp eax, 0
je end_program_1
mov [input_desc], EAX
push dword output_mode
push dword output_file
call [fopen]
add esp, 4*2
Cmp eax, 0
je end_program_2
mov [output_desc], EAX
read:
push dword [input_desc]
push dword 1
push dword 1
push dword character
call [fread]
add esp, 4*4
Cmp EAX, 0
je end_of_reading
inc byte [character]
push dword [output_desc]
```

push dword 1

push dword 1

push dword c

call [fwrite]

add esp, 4*4

jmp read

end_of_reading:

push dword [output-disc]

call [fclose]

add esp, 4

end_program-2:

push dword [input-close]

call [fclose]

add esp, 4

end_program-1: