1. ESP : 00001FF8h , ESP :

ZF = 0, ZF = 1

1. INCLUDE Irvine32.inc
2. INCLUDE macros.inc
3. .data
4. array1 SDWORD 40d,-90d,-67d,98d,78d,-45d,0d,32d
5. array2 SDWORD 8 DUP(0)
6. count = 0
7. .code
8. main PROC
10. mov eax, 8 ; parameter 1
11. mov esi, 0
12. Call savePositive
13. exit
14. main ENDP
15. savePositive PROC USES eax esi
16. mov ecx, eax ; ecx = 8
17. mov ebx, 0
18. mov edi, count
19. l1:
20. mov edx, array1[esi]
21. cmp edx, 0
23. jg pos ; true
24. jmp endd ; false
26. pos:
27. mov array2[ebx], edx
28. add ebx, 4
29. add esi, 4
30. add edi, 1
31. jmp outt
32. endd:
33. add esi, 4
35. outt:
36. loop l1
37. mov ecx, edi
38. mov esi, 0
39. l2:
40. mov eax, array2[esi]
41. Call WriteDec
42. add esi, 4
43. Call crlf
44. loop l2
45. ret
46. savePositive ENDP
47. END main

4.

INCLUDE Irvine32.inc

INCLUDE macros.inc

.data

N SDWORD 3

A SDWORD 5

B SDWORD 2

.code

main PROC

mov eax, N

mov ebx, A

mov edx, B

whilee:

cmp eax, 0

jbe endwhilee ; N <= 0

; N > 0

cmp eax, 3

jne andd

jmp elsee

andd:

cmp eax, ebx

jl truee

cmp eax, edx

jg truee

jmp elsee

truee:

sub eax, 2

jmp whilee

elsee:

sub eax, 1

jmp whilee

endwhilee:

mWrite "Value of n = "

Call WriteDec

exit

main ENDP

END main

5.

INCLUDE Irvine32.inc

INCLUDE macros.inc

.data

N DWORD 3

A DWORD 5

B DWORD 2

.code

main PROC

mWrite "Enter a number: "

Call ReadDec

cmp al, 1

je odd

cmp al, 3

je odd

cmp al, 2

je evenn

cmp al, 4

je evenn

odd:

mWrite "o"

jmp endd

evenn:

mWrite "e"

jmp endd

endd:

exit

main ENDP

END main

6.

INCLUDE Irvine32.inc

INCLUDE macros.inc

.data

A equ 100

B equ 200

cc equ 0

.code

main PROC

mov eax, A

mov ebx, B

mov edx, cc

mov ecx, 5

outer:

cmp ecx, 0

jb endo

add ebx, eax

mWrite "ebx (b) = "

push ecx

mov ecx, 5

push eax

mov eax, ebx

Call WriteDec

pop eax

Call crlf

inner:

cmp ecx, 0

jb endi

sub eax, 1

add edx, 10

loop inner

endi:

mWrite "a = "

Call WriteDec

Call crlf

push eax

mov eax, edx

mWrite "c = "

Call WriteDec

pop eax

Call crlf

pop ecx

loop outer

endo:

exit

main ENDP

END main

7.

INCLUDE Irvine32.inc

INCLUDE macros.inc

.data

Counter equ 8

.code

main PROC

call Crlf

mov ecx, Counter

outer:

push ecx

mov eax, Counter

inner:

call WriteDec

sub eax, 1

loop inner

call Crlf

pop ecx

loop outer

exit

main ENDP

END main

8.

INCLUDE Irvine32.inc

INCLUDE macros.inc

.data

.code

main PROC

mov al, 01110101b

add al, 0

call DumpRegs

jp evenn

mWrite "Odd parity"

jmp endd

evenn:

mWrite "Odd parity"

endd:

exit

main ENDP

END main