**ML Assignment**

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**Roll No:** 2089

**Batch:** S4 Comp

**Assignment 5:**

**Code:**

section .data

msg1 db "Count of Positive numbers:" len1 equ $-msg1

msg2 db "Count of negative numbers:" len2 equ $-msg2

array db 10,12,-21,-12,-19,-34,41

%macro print 2

mov rax,1

mov rdi,1

mov rsi,%1

mov rdx,%2

syscall

%endmacro

section .bss

count resb 2

pcount resb 2

ncount resb 2

totalcount resb 2

section .text

global \_start

\_start:

mov byte[count],07

mov byte[pcount],00

mov byte[ncount],00 mov rsi,array Up: mov al,00

add al,[rsi]

js neg

inc byte[pcount] jmp Down

neg:

inc byte[ncount]

Down:

add rsi,01

dec byte[count] jnz Up

mov bl,[pcount]

mov dl,[ncount]

b1:

print msg1,len1

mov bh,[pcount] call disp

print msg2,len2

mov bh,[ncount]

call disp

mov rax,60

mov rdi,00

syscall

disp:

mov byte[count],02

loop:

rol bh,04

mov al,bh

AND al,0FH cmp al,09

jbe l1

add al,07h

l1:add al,30h

mov[totalcount],al

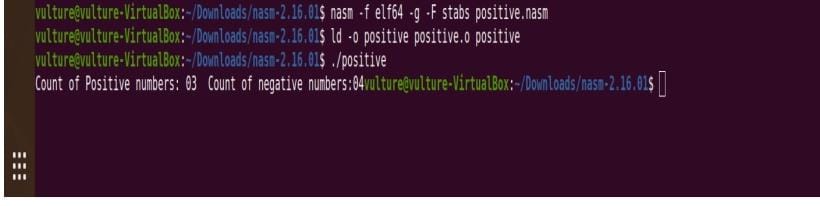
print totalcount,02

dec byte[count]

jnz loop

ret

**Output:**

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