ASSIGNMENT NO 5

PROBLEM STATEMENT:

Write an X86/64 ALP to count number of positive and negative numbers from the array.

SOURCE CODE:

```
section .data

welmsg db 10,'Welcome to count +ve and -ve numbers in an array',10

welmsg_len equ $-welmsg


pmsg db 10,'Count of +ve numbers::'

pmsg_len equ $-pmsg

nmsg db 10,'Count of -ve numbers::'

nmsg_len equ $-nmsg


nwline db 10


array dw 8505h,90ffh,87h,88h,8a9fh,0adh,02h,02h


arrcnt equ 8


pcnt db 0

ncnt db 0

section .bss

dispbuff resb 2
```

```nasm
%macro print 2
mov eax, 4
mov ebx, 1
mov ecx, %1
mov edx, %2
int 80h
%endmacro
section .text
global _start
_start:
print welmsg,welmsg_len
mov esi,array
mov ecx,arrcnt
up1:
bt word[esi],15
jnc pnxt
inc byte[ncnt]
jmp pskip
pnxt: inc byte[pcnt]
pskip: inc esi
inc esi
loop up1
print pmsg,pmsg_len
mov bl,[pcnt]
call disp8num
print nmsg,nmsg_len
mov bl,[ncnt]
```