**Title:- Count no. of positive and negative numbers**

**Assignment Name: - Write an ALP to count no. of positive and negative numbers from the array.**

section .data

title db 10,"This is the code for checking the count of positive and negative nos.",10

l1 equ $-title

mesg1 db 10,"The positive nos. are : ",10

l2 equ $-mesg1

mesg2 db 10,"The negative nos. are : ",10

l3 equ $-mesg2

%macro print 2

mov rax,1

mov rdi,1

mov rsi,%1

mov rdx,%2

syscall

%endmacro

array dq -1234h,3435h,356h,32A32h,3546h,748h,-746bh

pcnt db 0

ncnt db 0

newline db 10

section .bss

dispbuff resb 2

section .txt

global \_start:

\_start:

print title,l1

mov rsi,array

mov rcx,07

again:

bt qword[rsi],63

jnc pnxt

inc byte[ncnt]

jmp pskip

pnxt: inc byte[pcnt]

pskip: add rsi,8

loop again

print mesg1,l2

mov bl,[pcnt]

call again1

print newline,1

print mesg2,l3

mov bl,[ncnt]

call again1

print newline,1

mov rax,60

mov rdi,0

syscall

again1:

mov rdi,dispbuff

mov rcx,02

dispup1:

rol bl,4

mov dl,bl

and dl,0fh

add dl,30h

cmp dl,39h

jbe dispskip1

add dl,07h

dispskip1:

mov [rdi],dl

inc rdi

loop dispup1

print dispbuff,2

ret