//alp program to print a two digit number

%macro write 2

mov eax,4

mov ebx,1

mov ecx,%1

mov edx,%2

int 80h

%endmacro

%macro read 2

mov eax,3

mov ebx,0

mov ecx,%1

mov edx,%2

int 80h

%endmacro

section .data

msg1 db "Enter a two digit number",13,10

len1 equ $-msg1

msg2 db "The two digit number is ",13,10

len2 equ $-msg2

newLine db "",10,13

section .bss

num1 resb 2

num2 resw 1

disbuff resq 1

section .text

global \_start

\_start:

write msg1,len1

read num1,2

xor eax,eax

xor ebx,ebx

xor ecx,ecx

xor edx,edx

call convert

mov [num2],bx

write msg2,len2

xor eax,eax

xor ebx,ebx

xor ecx,ecx

xor edx,edx

mov bx,[num2]

call display

exit: mov eax,1

int 80h

convert:

mov esi,num1

mov edi,num2

mov cl,02h

xor eax,eax

xor ebx,ebx

up: rol bl,04h

mov al,[esi]

cmp al,39h

jbe skipc

sub al,07h

skipc: sub al,30h

add bl,al

mov [edi],bl

inc esi

inc edi

loop up

ret

display:

mov ecx,8

mov edi,disbuff

again: rol ebx,4

mov al,bl

and al,0fh

cmp al,09h

jbe down

add al,07h

down: add al,30h

mov [edi],al

inc edi

loop again

write disbuff,8

write newLine,1

ret

OUTPUT:

