// program to convert uppercase to lowercase and print error otherwise

section .data

inputMsg db 'Enter a uppercase alphabet : '

inputMsgLen equ $-inputMsg

errorMsg db 'The Character entered is neither uppercase nor lowercase', 13, 10

lenErrorMsg equ $-errorMsg

invalidMsg db 'The Character entered is not uppercase', 13, 10

lenInvalidMsg equ $-invalidMsg

newline db '', 13, 10

lenNewline equ $-newline

section .bss

lowercase resb 2

uppercase resb 2

section .text

global \_start

\_start:

mov eax, 4

mov ebx, 1

mov ecx, inputMsg

mov edx, inputMsgLen

int 80h

mov eax, 3

mov ebx, 0

mov ecx, uppercase

mov edx, 1

int 80h

mov eax, [uppercase]

cmp eax, 'A'

jb error

cmp eax, 'z'

ja error

cmp eax, 'Z'

ja invalid

call upperToLower

mov eax, 4

mov ebx, 1

mov ecx, newline

mov edx, lenNewline

int 80h

jmp exit

upperToLower:

;Converting upper to lower case

add eax, 32

mov [lowercase], eax

mov eax, 4

mov ebx, 1

mov ecx, lowercase

mov edx, 1

int 80h

ret

error:

;Displaying Message 'The Character entered is neither uppercase nor lowercase'

mov eax, 4

mov ebx, 1

mov ecx, errorMsg

mov edx, lenErrorMsg

int 80h

jmp exit

invalid:

;Displaying Message 'The Character entered is not uppercase'

mov eax, 4

mov ebx, 1

mov ecx, invalidMsg

mov edx, lenInvalidMsg

int 80h

jmp exit

exit:

mov eax, 1

int 80h

OUTPUT:





