

**;Write a program that takes a string and count the no of vowels in the string.
Display the count in decimal format.**

TITLE VOWEL IN A STRING

.MODEL SMALL

.DATA

STRLEN DB 80

STRSZ DB ?

STR DB 81 DUP('\$')

.STACK

.CODE

MAIN PROC FAR

MOV AX, @DATA

MOV DS, AX

;; GETTING THE NUMBER

LEA DX, STRLEN

MOV AH, 0AH

INT 21H

;; CALCULATING THE NUM OF WORD

MOV AX, 00

MOV CH, 00

MOV CL, STRSZ

LEA BX, STR

L2: CMP BYTE PTR[BX], 'a'

JE AD

CMP BYTE PTR[BX], 'e'

JE AD

CMP BYTE PTR[BX], 'i'

JE AD

CMP BYTE PTR[BX], 'o'

JE AD

CMP BYTE PTR[BX], 'u'

JE AD

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CMP BYTE PTR[BX], 'A'  
JE AD  
CMP BYTE PTR[BX], 'E'  
JE AD  
CMP BYTE PTR[BX], 'I'  
JE AD  
CMP BYTE PTR[BX], 'O'  
JE AD  
CMP BYTE PTR[BX], 'U'  
JE AD  
JMP EX
```

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AD: INC AX  
EX: INC BX
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LOOP L2
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;; CONVERTING TO DECIMAL  
MOV CX, 00  
MOV BX, 10
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L3: MOV DX, 00  
INC CX  
DIV BX  
CMP AX, 00  
PUSH DX  
JG L3
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;; PRINTING IN DECIMAL  
;; NEW LINE CHARACTER  
MOV AH, 02H  
MOV DL, 0AH  
INT 21H
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DIS: POP DX  
OR DX, 30H  
MOV AH, 02H
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INT 21H
LOOP DIS

;; ENDING PROGRAM
MOV AH, 4CH
INT 21H
MAIN ENDP

END MAIN