Experiment - 7

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Write an assembly language program to count number of vowels in a given string.

```
  .MODEL SMALL
.DATA
inp db 0ah,0dh,'enter the string: ','$'
msg db 0ah,0dh,'the number of vowels: ','$'
vowel db 'a','A','e','E','i','I','o','O','u','U','$'
databuf db 100,0,100 dup('$')
.code
START:
 mov ax,@data
 mov ds,ax

 lea dx,inp
 mov ah,09h
 int 21h

 lea dx,databuf
 mov ah,0ah
 int 21h
```

```
       mov si,dx

        lea dx,msg
        mov ah,09h
        int 21h

        mov bl,00h
check:  lea di,vowel
        mov cx,000ah
        mov al,[si]
cont:
        cmp al,[di]
        je found
        inc di
        loop cont
        jmp next
found:  inc bl
next:   inc si
        cmp databuf[si],0ah
        jne check
        mov dl,bl
        add dl,30h
        mov ah,02h
        int 21h


        .EXIT
```