

```
1
2 DATA SEGMENT
3 STRING DB 100 DUP(?)
4 MSG1 DB 10,13,"ENTER A STRING: $"
5 MSG2 DB 10,13,"NO. OF VOWELS_FOUND: $"
6 VOWELS DW 0
7 DATA ENDS
8 CODE SEGMENT
9     ASSUME CS:CODE,DS:DATA
10    START:
11
12        MOV AX, DATA
13        MOV DS, AX
14        MOV ES, AX
15
16        MOV AH, 9
17        LEA DX, MSG1
18        INT 21H
19
20        LEA DI, STRING
21
22        MOV AH, 1
23        READ:
24        INT 21H
25        CMP AL, 0DH
26        JE ENDOFSTRING
27        STOSB
28        JMP READ
29
30        ENDOFSTRING:
31        MOV AL, "$"
32        STOSB
33
34        XOR BX, BX
35
36        COUNT:
37        MOV AL, STRING[BX]
38        CMP AL, "$"
39        JE EXIT
40        CMP AL, "a"
41        JE VOWEL_FOUND
42        CMP AL, "e"
43        JE VOWEL_FOUND
44        CMP AL, "i"
45        JE VOWEL_FOUND
46        CMP AL, "o"
47        JE VOWEL_FOUND
48        CMP AL, "u"
49        JE VOWEL_FOUND
50        CMP AL, "A"
51        JE VOWEL_FOUND
52        CMP AL, "E"
53        JE VOWEL_FOUND
54        CMP AL, "I"
55        JE VOWEL_FOUND
56        CMP AL, "O"
57        JE VOWEL_FOUND
58        CMP AL, "U"
59        JE VOWEL_FOUND
60        INC BX
61        JMP COUNT
62
63        VOWEL_FOUND:
64        MOV CX, VOWELS
65        INC CX
```

```
66      MOV VOWELS, CX
67      INC BX
68      JMP COUNT
69
70      EXIT:
71
72      MOV AH, 9
73      LEA DX, MSG2
74      INT 21H
75
76      MOV AH, 2
77      MOV DX, VOWELS
78      ADD DX, 30H
79      INT 21H
80
81      MOV AH, 4CH
82      INT 21H
83
84  CODE ENDS
85  END START
```