

CHALLENGE 2: CHARACTER COUNT

SUGGESTED TIME: 30 MINUTES

A programmer wants to be able to count the number of vowels in text message. A vowel is any of the following characters: A, E, I, O or U.

The program must ask the user to type in a message with the prompt: "Type your message here: "

The program should then count all of the vowels in the message and display the results in a table as shown below:

```
Type your message here: hello
-----
| Letter| Count |
-----
|  A   |    0  |
|  E   |    1  |
|  I   |    0  |
|  O   |    1  |
|  U   |    0  |
-----
Other characters: 3
Total characters: 5
```

Example program output 1

```
Type your message here: Aa!Ee.
-----
| Letter| Count |
-----
|  A   |    2  |
|  E   |    2  |
|  I   |    0  |
|  O   |    0  |
|  U   |    0  |
-----
Other characters: 2
Total characters: 6
```

Example program output 2

```
Type your message here: Once upon a time
-----
| Letter| Count |
-----
|   A   |   1   |
|   E   |   2   |
|   I   |   1   |
|   O   |   2   |
|   U   |   1   |
-----
Other characters: 9
Total characters: 16
```

Example program output 3

Using the file Q06.py:

Amend the program to:

- allow the user to type in a message using the prompt
"Type your message here: "
- count each vowel used
- count all characters that are not vowels
- display the results in a table as shown above
- display the number of characters that are not vowels (shown as other characters in the examples above)
- display the total number of characters in the message

Do **not** add any additional functionality

Use comments, whitespace and layout to make the program easier to read and understand

Save your file in the COMPLETED_CODING folder as **Q06_FINISHED.py**

A self marking online version of this challenge can be found here:

<https://blog.withcode.uk/2022/05/q6-python-exam-practice-questions-for-edexcel-gcse-computer-science/2>