Mock Practicum

Task:

Create a program that

- Input user for strings until they enter an empty string or they have entered 20 words.
- Draws each word as a column.
    - All vowels are colored red, otherwise colored white.
- Print out the number of vowels for each word.

You are given three files:

1. words.py
   - String processing functions
2. words_test.py
   - Test file for words.py
3. draw.py
   - Turtle drawing functions for final program
   - Will use functions from words.py

Part 1: words.py and words_test.py

You are given three functions, already stubbed out for you.

1. validate_string(string)
    a. Implement function as stated in the documentation.
    b. You can use isalpha().
    c. Implement using TDD, put your test cases in words_test.py.
2. is_vowel(character)
    a. Implement function as stated in the documentation.
    b. Implement using TDD, put your test cases in words_test.py.
3. get_vowel_count(string)
    a. Implement function as stated in the documentation.
    b. Use is_vowel().
    c. You must use a while loop.
    d. Implement using TDD, put your test cases in words_test.py.

Part 2: draw.py

You are given constant values and an init() function. All functions from words.py are imported and must be used to implement the drawing functions.

1. draw_letter_pixel(color, letter)
    a. Implement function as stated in documentation.
    b. Use t.write(letter, align="center", font=('Arial', 19, "normal") to write the letter.
2. draw_string(string)
    a. Implement function as stated in documentation.
    b. Use draw_letter_pixel().

    c. Use a while loop.
    d. You can create helper functions if needed.
3. next_column()
    a. Implement function as stated in documentation.