Lab 6.02 - Word Counter In this lab we will implement a word frequency algorithm. It will tell you how many of each word you had in an essay. At the top of the document save a variable with a long paragraph (example below). In order to turn this paragraph into a list of lower case words we will use the `split(" ")`, `replace()`, and `lower()` functions. There is code at the bottom of this page that will do this for you. Feel free to read more about `split()` in the Python documentation, but it's not critical to this lab. For each word in the document, count the number of times it occurs. Consider the following phrase: 'Cats are cool. Baby cats are called kittens. Cats make great pets.' The word 'cats' appears 3 times. The word 'are' appears 2 times. The program will first create a dictionary with the words as keys and the number of times they occur as values. Then it will prompt the user which word they are curious about. If the word was in the paragraph it will print the number of times it occurred. ## Example ```python >>> python3 word_frequency_lab.py What word would you like to know the frequency of? cats 'cats' occurs 3 times ``` ```python >>> python3 word_frequency_lab.py What word would you like to know the frequency of? dogs 'dogs' does not occur ``` ### `split`, `replace`, and `lower` This is the code to lower case the letters in the paragraph, remove the periods, and split them into individual words. ```python example_paragraph = "It was a beautiful day in New York City. Our hero Ariana Grande was on a walk from the Standard to Duane Reade. Ariana Grande was walking rather quickly because she had lived in New York for a few months. All of a sudden a slimy donut appeared out of nowhere. Ariana Grande decided to prance foolishly instead of dealing with the situation. Thrown off from Duane Reade Ariana Grande decides to go to Times Square instead. What a beautiful day in New York." #make all letters lowercase example_paragraph_lower = example_paragraph.lower() #remove all periods example_paragraph_lower_no_punctuation = example_paragraph_lower.replace(".", "") #convert paragraph into a list of individual strings example_word_list = example_paragraph_lower_no_punctuation.split(" ") ```