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CS 212

Assignment 3

Due: 9/25/2023

String of Words to Dictionary to Bar Chart

Description

This program consists of one main function which takes a string as an input, then splits the string up into a list separated by spaces. After, while the string of words is now in a list, it makes every word lowercase and removes all periods. Once the list is prepared, it is translated into a dictionary where every unique word is a key, and the value is how many times the word occurs within the string. The function then returns the newly made dictionary.

The next main part of this program is the making of the bar chart from the dictionary where the x-axis is the words in the string and the y-axis is the occurrences. This is done by first, making lists for the keys and values (using list(), .keys(), and .values()). After, using *matplotlib* (imported), the program sets the title, axes label, rotates x-axis labels to be viewed better and generates the bar chart (in non-default orange). The bar chart is then shown.

Input

"This is a sample text. Sample text is a good example as It showcases how to count words in a text string."

Output

A graph with text on it

Description automatically generated