Sample Midterm 2 — String Processing

1. Write a function that counts all vowels in a string.

2. Write a function that changes all letters ‘x’ in a string to ‘ks’ without using replace.

3. Write a function that takes a single string as an argument and returns the ratio of vowels over consonants in the string. Non-letters are ignored.

4. Write a function that finds all occurrences of ‘ph’ in a string and replaces them with ‘f’, also without using replace. (Hint: In this case, you will need to use indices into the string.)