**OOSD Exercises – Lists, Functions, Files**

**Exercise 1:** Write a Python function to read a sentence (text) and return a list of the length of each word in the sentence.

Use the function to read text from a file and calculate the length of each word in each line.

**Exercise 2:** Write a Python function to read a sentence and reverse every word that starts with ‘a’.

Use the function to read text from a file, reverse each word that start with ‘a’ and save the result into another file.

**Exercise 3:** Write a Python function **replace\_all(list, l\_out, l\_in)** that takes three parameters: a list of numbers, a list of numbers to be replaced and a list of numbers to use as replacements.

For example **replace\_all([**1,2,5,6,2,7,1,2], [2,4],[200,400]) will replace all occurrences of 2 with 200 and all occurrences of 4 with 400 in the list [1,2,5,6,2,7,1,2], so should return [1,200,5,6,200,7,1,200]

**Exercise 4:** Write a Python function to replace every third word in a string with “hello”.

Use the function to read a text from a file, replace every third word with ‘hello’ and write the output in another file.

**Exercise 5:** Write a Python function to replace every word in a sentence which is longer than 6 characters with “blah”.

Use the function to read a text from a file, replace every long word with ‘blah and write the output in another file.

**Exercise 6:** Write a Python program that reads text from a file and generates a dictionary – a list of unique words. Save those words in a new file, one word per line.