**CONTROLED ASSESSMENT 1**

**Task 1 analysis**

Take a set sentence, and convert it into a list. Using the list, split each item in list then identify its position. Create a variable which is assigned by the user’s input, then search the list for that variable and output its position. If the variable isn’t found, it must output an error. The sentences’ case should not matter, therefore the list should not be case sensitive.

Requirements:

* Word input
* Sentence into list
* List positioning
* Non-case sensitive input

**Task 2 analysis**

Using a similar method as above, take a set sentence and convert it into a list, splitting each word into individual items. Then replace each word in the original sentence with its position in the list. Create a file containing the list of words and the words positions.

Requirements:

* Sentence input
* Sentence into list
* Sentence list into positions list
* File output with both lists
* Non-case sensitive input and output

**Task 3 analysis**

Take the method from above, and extend it so that it works as case sensitive and includes punctuation in the list. As well as, being able to act as a compression system. It should be able to use the file which contains the word list and the positions of the words in the original sentence to recreate the sentence again, including capitols and punctuation.

Requirements:

* Reading files
* Case sensitive list reading
* Case sensitive list creating
* List words positions changing