## Smart Software: Intern Application, coding assignment 2

You have been tasked with working on a translation web application. One of the new features you have been asked to develop is to calculate the word count and the most commonly used words in a passage of text a user is translating.

You need to generate a function/method to get the word count and a list of the 10 most commonly used words in a passage of text and return it along with the number of times each word occurs.

You should ignore non-word characters (such as commas full stops, colons etc). An example of a possible input is shown below.

**Task**: How would you code this using a programming language of your choice?

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**Time guidance:** You should aim to spend between 30 and 90 minutes on this task.

*A sample of representative test is available below:*

The year 1866 was signalised by a remarkable incident, a mysterious and

puzzling phenomenon, which doubtless no one has yet forgotten. Not to

mention rumours which agitated the maritime population and excited the

public mind, even in the interior of continents, seafaring men were

particularly excited. Merchants, common sailors, captains of vessels,

skippers, both of Europe and America, naval officers of all countries,

and the Governments of several States on the two continents, were

deeply interested in the matter.

For some time past vessels had been met by "an enormous thing," a long

object, spindle-shaped, occasionally phosphorescent, and infinitely

larger and more rapid in its movements than a whale.

The facts relating to this apparition (entered in various log-books)

agreed in most respects as to the shape of the object or creature in

question, the untiring rapidity of its movements, its surprising power

of locomotion, and the peculiar life with which it seemed endowed. If

it was a whale, it surpassed in size all those hitherto classified in

science. Taking into consideration the mean of observations made at

divers times--rejecting the timid estimate of those who assigned to

this object a length of two hundred feet, equally with the exaggerated

opinions which set it down as a mile in width and three in length--we

might fairly conclude that this mysterious being surpassed greatly all

dimensions admitted by the learned ones of the day, if it existed at

all. And that it DID exist was an undeniable fact; and, with that

tendency which disposes the human mind in favour of the marvellous, we

can understand the excitement produced in the entire world by this

supernatural apparition. As to classing it in the list of fables, the

idea was out of the question.