Programming and Classification:

2. Python Programming Language (lists, dictionries, NKTL)

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You will need NLTK `https://www.nltk.org/`.

16. Construct a function that takes as an input some number of inputs. The function checks if all of them are numbers. If so, it returns sum of them and the number inputs. Otherwise it returns 0.

17. Write a function that uses `while - else` structure.

18. Use `https://www.wordclouds.com/` to build a word cloud for your favourite book.

19. Implement a Cesar cipher using with a given shift parameter d in Python. Use functions `translate()` and `maketrans()`

20. $\star\star\star$ Find your favourite book in text format (if you cannot find it, try e.g. Heller's Catch 22).
    (a) Remove all the punctuation.
    (b) Remove all stop words.
    (c) Remove infected words to their word stem (stemming words).
    (d) List all the words that appear at least 100 times in the text. Than sort them in alphabetical order.

21. $\star\star\star$ Construct a dictionary that assigns each user (represented as a string) his address (string). Sort and list this dictionary by the addresses. Use `lambda` function.

22. $\star\star$ Import all books from **nltk.book**. Check how many times the word `knight` appears in `text6` (Monty Python) and `text7` (Wall Street Journal).

23. $\star\star\star$ Import all books from **nltk.book**. Construct a set of words that appear in `text6` (Monty Python) but do not appear in `text7` (Wall Street Journal).

24. $\star\star\star$ Import all books from **nltk.book**. Construct a set of words that appear in all texts `text1` - `text9`.

25. $\star\star\star\star$ Find the longest sentence in `text2`.