# **Assignment 1**

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#### How to run:

The programs can run in terminal with the «python» command followed by the filename.

- 1: Open terminal and navigate to the location of the python files. (uses cd <folder>)
- 2: Type in <python/python3> <filename.py>. Example «python3 task2.py».

If unsure, please watch the video from allthingseducational on youtube.

## My example input

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent at diam ipsum. Duis fringilla malesuada tellus, at venenatis felis mollis a. Maecenas semper nisi ut elit condimentum accumsan. Sed facilisis pretium purus, eu rhoncus mauris pulvinar id. Nulla facilisi. Maecenas dictum dolor massa, ut rhoncus velit congue sit amet. Donec vehicula libero eget nisl dignissim, in convallis tortor consectetur. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Sed efficitur cursus turpis, ac auctor dui tincidunt id. Phasellus viverra sapien a risus pretium venenatis. Etiam porttitor sem sit amet mauris placerat tincidunt. Cras ac velit nulla.

#### Task 1

Task 1 will ask a user for input (Write some text:) until the conditions are reached. According to the assessment, it should be 5 sentences ending with either .!?. If the condition isn't met at the first input, the program will continue to ask for more text. Under is an example where the condition is met at the first input.

```
Write in some text:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent at diam ipsum. Duis fringilla malesuada tellus, at venenatis felis mollis a. Maecenas semper nisi ut eli t condimentum accumsan. Sed facilisis pretium purus, eu rhoncus mauris pulvinar id. Nulla facilisi. Naecenas dictum dolor massa, ut rhoncus velit conque sit amet. Donce v chicula libero eget nisl dignissim, in convallis tortor consectetur. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Sed efficitur cursus turpis, ac auctor dui tincidunt id. Phasellus viverra sapien a risus pretium venenatis. Etiam porttitor sem sit amet mauris placerat tincidunt. Cras ac velit nulla.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent at diam ipsum. Duis fringilla malesuada tellus, at venenatis felis mollis a. Maecenas semper nisi ut eli t condimentum accumsan. Sed facilisis pretium purus, eu rhoncus mauris pulvinar id.
```

### Task 2

Takes the same input as Task1, but will print it as individual sentences and count the number of tokens. A token is word wither alphabetic or numeric, punctation marks or other special characters except from those that should not be considered a token. Ref the discussion on Moodle about "over-scrupulous". Under is an example which gives more than 5 sentences on first input.

```
Bappel@Bappel ~/L/M/c/M/F/a/Al> python3 task2.py
Write in some text:
Loren ipsum dolor sit amet, consectetur adipiscing elit. Praesent at diam ipsum. Dui s fringilla malesuada tellus, at venenatis felis mollis a. Maecenas semper nisi ut e lit condimentum accumsan. Sed facilisis pretium purus, eu rhoncus mauris pulvinar id . Nulla facilisi. Maecenas dictum dolor massa, ut rhoncus velit congue sit amet. Don ec vehicula libero eget nisl dignissim, in convallis tortor consectetur.

Total number of tokens: 45
Loren ipsum dolor sit amet, consectetur adipiscing elit.
Praesent at diam ipsum.
Duis fringilla malesuada tellus, at venenatis felis mollis a.
Maecenas semper nisi ut elit condimentum accumsan.
Sed facilisis pretium purus, eu rhoncus mauris pulvinar id.
```

#### Task 3

Task 3 will take the same input as task 1 and 2, and will tokenize the input the same way as task two. In addition task 3 will count the different occurrences of words, letters, delimiters and so on. The task 3 will not output the given text, as this wasn't included in the tutors output/input example on Moodle. Under is an example where user gave more than 5 sentences at the first input.

```
Bappel@Bappel ~/L/M/c/M/F/a/A1> python3 task3.py
Write in some text:
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent at diam ipsum. Duis
 fringilla malesuada tellus, at venenatis felis mollis a. Maecenas semper nisi ut eli
t condimentum accumsan. Sed facilisis pretium purus, eu rhoncus mauris pulvinar id. N
ulla facilisi. Maecenas dictum dolor massa, ut rhoncus velit conque sit amet. Donec v
ehicula libero eget nisl dignissim, in convallis tortor consectetur. Vestibulum ante
ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Sed efficitur
cursus turpis, ac auctor dui tincidunt id. Phasellus viverra sapien a risus pretium
venenatis. Etiam porttitor sem sit amet mauris placerat tincidunt. Cras ac velit null
a.
Total number of words: 37 (209 characters)
Number of unique words: 34
Words staring with uppercase: 5
Punctation mark , has count equal to: 3
Punctation mark . has count equal to: 5
Number of Numeric words: 0
```