

Assignment 6 -- String Manipulation

The aim of the following three tasks is to learn how to extract and to delete certain parts of character strings (with a given basic set of string functions: only use those defined in the lecture on pages 36 and 37, unless otherwise specified).

- 1) Input is one line (a sentence) of words. The output is to be a list of all the words entered, each on a separate line.
To decide whether a certain character is part of a word, use the standard library function `isalpha(c)`, which returns true if the char-variable `c` has alphabetical content, which is equivalent to being part of a word.

```
word separation  V-0.1
enter a sentence with several words: LookAt this super-dooer t3st sentence!
LookAt
this
super
dooer
t
st
sentence
end program
```

- 2) Your program is to recognise fractions like $28/7$ or $1/3$. To test your program, output the numerator and the denominator with their respective value.

```
scan fraction  V-0.02
enter fraction (e.g. 2/3): 4711/239
numerator = 4711
denominator = 239
end prog
```

- 3) You already know how to trim the leading and the trailing blanks of a string. Now try to remove all inner blanks, while keeping all the leading and the trailing blanks.

```
string trim inside  V-0.03
enter a string, with some words and multiple blanks in between: bla blub blob blue
you entered: " bla blub blob blue "
now, with the inner blanks removed: " blablubblobblue "
end string trim inside
```