## FUNCTIONAL COLLECTION PROCESSING: TRANSFORMATIONS AND SELECTIONS

POETRY OF PROGRAMMING - CLOJURE ASSIGNMENTS

(1) Compute the sum of those numbers between 1 and 100 (inclusive) that are divisible by 5.

There are at least three different strategies to get the sequence of numbers  $5,10,15,\ldots,100$ .

- (a) Selecting those numbers from  $1,2,3,\ldots,100$  that are divisible by 5. Use filter!
- (b) Producing the multiples of 5 by multiplying every number in the sequence  $1,2,3,\ldots,20$  by 5. Use map!
- (c) Use range only!

Check the answer by implementing all 3 strategies!

(2) Write a function short-words, that from a collection of strings selects the ones shorter than 5.

```
(short-words ["hey" "hello" "" "raspberry"])
("hey" "")
```

(3) Write a function a-words that takes a collection of strings, and returns those strings that starts with letter a or A. The strings may have some leading space characters. For example,

```
(a-words [" hello " "apple" " ABC" "hey"])
("apple" " ABC")
```

HINT: write a predicate that checks whether a word starts with a or A when it's trimmed.