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,. . . ,100. You can choose one.

   (a) Selecting those numbers from 1,2,3,. . . ,100 that are divisible by 5. Use `filter`!
   (b) Producing the multiples of 5 by multiplying every number in the sequence 1,2,3,. . . ,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.