

FUNCTIONS ON NUMBERS

POETRY OF PROGRAMMING – CLOJURE ASSIGNMENTS

- (1) Write a function `average` that calculates the mean (average) of a collection of numbers.

```
(average [1 2 3 4 5])  
3  
(average [1.3 2.4 1.7 2.9])  
2.075
```

- (2) Write a function `sum-of-digits` that returns the sum of the digits of a given number.

```
(sum-of-digits 1)  
1  
(sum-of-digits 12)  
3  
(sum-of-digits 123)  
6  
(sum-of-digits 999)  
27
```

One way to extract the digits is to convert the number into a string. Then digits are characters. The characters can be assigned numerical values by using a hash-map.