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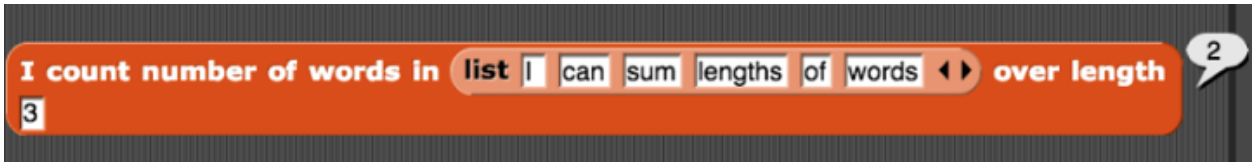
Easy Problems

Charles Thorson
Make a block that checks through a list and counts how many words that are longer than n length.



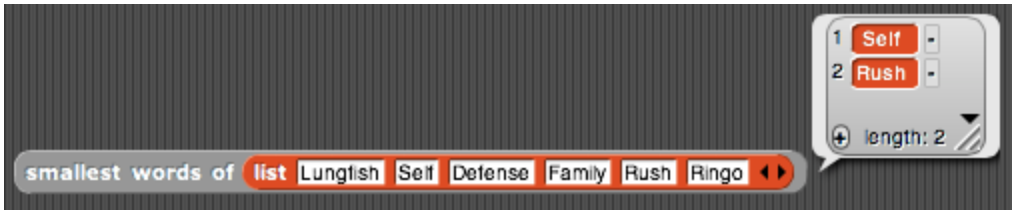
Jeffrey Jacinto
Write the block 'Short Stuff' that reports the words in a sentence that are less than the input length as a list.

Jobel Vecino
Write a block that takes a list of words and keeps only words that have an odd number of letters and have a length with a cube above 40.

Block:

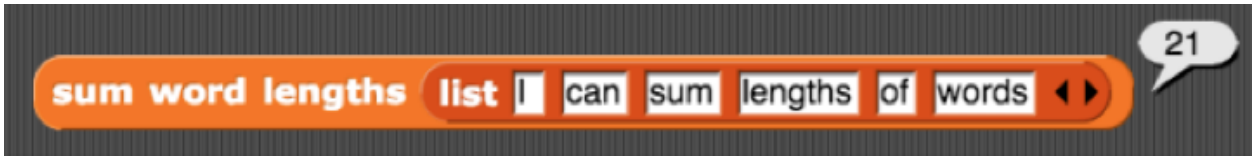
Medium Problems

Josh Perline:
Report only the smallest words in the list.
* Assume you have a **min** block that given two numbers, reports the smaller of the two.



Franklin Lee
Reverse a sentence without using loops, only higher-order functions. [Tests for: knowledge of combine function, ability to create helper functions if necessary, or explore functionalities of HOFs] Challenge: create a reverse-word function.

Charles Thorson
Use a HOF to make a block that sums the length of the words in a list.



Jeffrey Jacinto

Write the block ‘A-list‘ that returns the length of the largest word that starts with the letter ‘a’ or ‘A’ from the input sentence.

Tierney Henderson:

Using HOFs, create a block that takes in a list of words and returns only words in which both the first and last letter are vowels.

Challenging Problems

Charles Thorson

Make a block that applies the function f(x) = (x^(number of digits in x)) to all the values in the list, and finds the difference between the product of all the even terms in the new outputted list and the product of all the odd terms in the new outputted list.

* Assume you have an exponentiation block that given two numbers x and y, reports x^y.

Jeffrey Jacinto

Write the block ‘Codify’ that takes a sentence and returns the sum of the squares of only the even lengths of the words, and joins this to the number of words of even length.

(Apples → 6^2 = 36 okay → 4^2 = 16
36 + 16 = 52, joined with number of even words = 2 → 522)