Lists and HOFs

(a) Determine the domain and range of the following Snap! blocks.

Domain: _____, _____

Range: _____

Domain of Foo: _____

Range of Foo: _____

Type of Bar: _____

(b) Fill in the information table for the Higher Order Functions.

Higher Order Function	Domain	Range	Notes
map ( ) over 目			
keep items such that ( ) from 目			
combine with ( ) items of 目			

Function Input

	Type	Domain	Range	Notes
map				
keep				
combine				

(c) Fill in the blanks so that Keep reports a list of the numbers from MyList.

MyList = list(3, hello, 8, goodbye, 4, 7)

Keep items such that (_____) from (_____)

(d) Write an expression that reports the sum of the squares of the numbers in YourList.

```
YourList = list(4, 2, 3, 1)
```

(e) Complete the following block so that it works as described.

prepend every `anti` `dote·pasto·gone·body`   antidote antipasto antigone antibody

+ prepend + every + (word) + (sentence) +

(f) Describe the output of the following code. OurList is a list of words.

combine with (join ☐ ☐ ◀▶) ▶ items of
map (letter (length of ☐) of ☐) ▶ over (Our List) ◀▶

Challenge Problem

(a) Given a list of salaries, some of which go into the millions, return the salary of the lowest-paid millionaire. You are allowed to use a ( ) min ( ) helper block that takes two numbers as inputs and reports the minimum of the two numbers.

lowest-paid millionaire (list 1 2 3000000 4 5000000 6 ◀▶)   3000000

+ lowest-paid + millionaire + (list) +