

# The Design Recipe

For the word problems below, assume you have `animalA` and `animalB` defined in your code.

**Directions :** Define a function called `is-old`, which consumes a Row of the animals table and *computes* whether it is more than 12 years old.

## Contract and Purpose Statement

Every contract has three parts...

# is-old :: ( r :: Row ) -> Boolean  
function name domain range

# Consumes an animal, and computes whether it's age is > 12

what does the function do?

## Examples

Write some examples, then circle and label what changes...

**examples:**

is-old ( "animalA" ) **is** animalA["age"] > 12  
function name input(s) what the function produces  
is-old ( "animalB" ) **is** animalB["age"] > 12  
function name input(s) what the function produces

**end**

## Definition

Write the definition, giving variable names to all your input values...

**fun** is-old( r ):  
function name variable(s)  
r["age"] > 12  
what the function does with those variable(s)

**end**

**Directions :** Define a function called `name-has-s`, which returns true if an animal's name contains the letter "s"

## Contract and Purpose Statement

Every contract has three parts...

# name-has-s :: ( r :: Row ) -> Boolean  
function name domain range

# Consumes an animal, and computes whether its name contains an "s"

what does the function do?

## Examples

Write some examples, then circle and label what changes...

**examples:**

name-has-s ( "animalA" ) **is** string-contains(animalA["name"], "s")  
function name input(s) what the function produces  
name-has-s ( "animalB" ) **is** string-contains(animalB["name"], "s")  
function name input(s) what the function produces

**end**

## Definition

Write the definition, giving variable names to all your input values...

**fun** name-has-s( r ):  
function name variable(s)  
string-contains(r["name"], "s")  
what the function does with those variable(s)

**end**