

The Design Recipe

For the word problems below, assume `animalA` and `animalB` are defined as the data rows for Felix and Midnight, respectively.

Directions: Define a function called `is-cat`, which consumes a `Row` of the `animals` table and *computes* whether the animal is a cat.

Contract and Purpose Statement

Every contract has three parts...

#	is-cat::	(r :: Row)	->	Boolean
	<i>function name</i>	<i>domain</i>		<i>range</i>

```
# Consumes an animal, and computes whether the species == "cat"
```

what does the function do?

Examples

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

examples:

$$\text{is-cat} \left(\text{"animalA"} \right) \text{ is } \text{_____}$$

$$\text{_____} \left(\text{_____} \right) \text{ is } \text{_____}$$

end

Definition

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

```

fun is-cat( r ):

```

what the function does with those variable(s)

end

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

Contract and Purpose Statement

Every contract has three parts...

:: ->

function name domain range

what does the function do?

Examples 1

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

examples:

<i>function name</i>	<i>input(s)</i>		<i>what the function produces</i>

<i>function name</i>	<i>input(s)</i>		<i>what the function produces</i>

end

Definition

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

fun () :

function name *variable(s)*

what the function does with those variable(s)

end