

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 `lookup-fixed`, which looks up whether or not an animal is fixed.

Contract and Purpose Statement

Every contract has three parts...

`lookup-fixed::` `(r :: Row)` `->` `Boolean`

function name *domain* *range*

Consumes an animal, and looks up the value in the fixed column.

what does the function do?

Examples

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

examples:

`_____` `(` `_____` `)` `is` `_____`

function name *input(s)* *what the function produces*

`_____` `(` `_____` `)` `is` `_____`

function name *input(s)* *what the function produces*

end

Definition

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

fun `lookup-fixed(` `_____` `)` `:`

function name *variable(s)*

`r["fixed"]`

what the function does with those variable(s)

end

Directions: Define a function called `lookup-sex`, which consumes a Row of the animals table and looks up the sex of that animal.

Contract and Purpose Statement

Every contract has three parts...

`_____` `::` `_____` `->` `_____`

function name *domain* *range*

`_____`

what does the function do?

Examples

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

examples:

`_____` `(` `_____` `)` `is` `_____`

function name *input(s)* *what the function produces*

`_____` `(` `_____` `)` `is` `_____`

function name *input(s)* *what the function produces*

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