# The Design Recipe

Referenced from lesson [Method Chaining](https://www.bootstrapworld.org/materials/spring2021/en-us/courses/data-science/lessons/method-chaining/index.shtml) (Spring, 2021)

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

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

| **Contract and Purpose Statement** |  |
| --- | --- |

*Every contract has three parts…​*

is-dog::Row->Boolean

Consumes an animal, and computes whether the species == "dog"

| **Examples** |  |
| --- | --- |

*Write some examples, then circle and label what changes…​*

examples:

\_\_\_\_is-dog (animalA)\_\_\_\_ is animalA["species"] == "dog"

\_\_\_\_is-dog (animalB)\_\_\_\_ is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

end

| **Definition** |  |
| --- | --- |

*Write the definition, giving variable names to all your input values…​*

fun is-dog(r):

\_\_\_\_r["species"] == "dog"

end

**Directions**: Define a function called is-female, which consumes a Row of the animals table and returns true if the animal is female.

| **Contract and Purpose Statement** |  |
| --- | --- |

*Every contract has three parts…​*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_::\_\_\_\_\_\_->\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

| **Examples** |  |
| --- | --- |

*Write some examples, then circle and label what changes…​*

examples:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_\_\_\_)\_\_\_\_ is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_\_\_\_)\_\_\_\_ is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

end

| **Definition** |  |
| --- | --- |

*Write the definition, giving variable names to all your input values…​*

fun \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(\_\_):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

end

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