The Design Recipe

For the word problems below, assume you have ${\tt animal B}$ and ${\tt animal B}$ 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 wheth	ner 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 fu	action produces
is-old ("animalB") is animalB["age"] > 12	
function name input(s)	what the fu	action produces
end		
Definition		
Write the definition, giving variable names to all your input	values	
funis-old(r):		
function name variable(s)		
r["age"] > 12		
wh end	nat the function does with those variable(s)	
Directions: Define a function called name-has	s – s , which returns true if an animal's na	me contains the letter "s"
Contract and Durnose Statement		
Contract and Purpose Statement		
Every contract has three parts		
·	(r :: Row)	-> Boolean
Every contract has three parts	(r :: Row)	-> Boolean range
Every contract has three parts #name-has-s::	domain	
Every contract has three parts #	domain	
Every contract has three parts #	domain ner its name contains an "s"	
Every contract has three parts #	domain ner its name contains an "s"	
# name-has-s:: function name # Consumes an animal, and computes wheth Examples	domain ner its name contains an "s"	
# name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples:	domain ner its name contains an "s" what does the function do?	range
Every contract has three parts #name_has_s::	domain mer its name contains an "s" what does the function do?) is string-contains(animal	range
# name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples: name-has-s ("animalA"	domain mer its name contains an "s" what does the function do?) is string-contains(animal	range A["name"], "s") action produces
Every contract has three parts # name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples: name-has-s ("animalA" function name input(s)	domain ner its name contains an "s" what does the function do?) is string-contains(animal what the fu	range A["name"], "s") action produces
Every contract has three parts # name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples: name-has-s ("animalA" input(s) name-has-s ("animalB"	domain ner its name contains an "s" what does the function do?) is string-contains(animal what the fu	range A["name"], "s") action produces B["name"], "s")
Every contract has three parts # name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples: name-has-s ("animalA" function name input(s) name-has-s ("animalB" function name input(s)	domain ner its name contains an "s" what does the function do?) is string-contains(animal what the fu	range A["name"], "s") action produces B["name"], "s")
# name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples: name-has-s ("animalA" function name input(s) name-has-s ("animalB" function name input(s) name-has-s ("animalB" function name input(s)	domain ner its name contains an "s" what does the function do?) is string-contains(animal what the fu) is string-contains(animal what the fu	range A["name"], "s") action produces B["name"], "s")
Every contract has three parts # name-has-s::	domain ner its name contains an "s" what does the function do?) is string-contains(animal what the fu) is string-contains(animal what the fu	range A["name"], "s") action produces B["name"], "s")
Every contract has three parts # name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples: name-has-s ("animalA" function name input(s) name-has-s ("animalB" function name input(s) Planting input(s) Planting input(s) end Definition Write the definition, giving variable names to all your input	domain ner its name contains an "s" what does the function do?) is string-contains(animal what the fu) is string-contains(animal what the fu	range A["name"], "s") action produces B["name"], "s")
Every contract has three parts # name-has-s:: function name # Consumes an animal, and computes wheth Examples Write some examples, then circle and label what changes examples: name-has-s ("animalA" function name input(s) name-has-s ("animalB" function name input(s) Particular input(s) end Definition Write the definition, giving variable names to all your input to the definition, giving variable names to all your input to the definition, giving variable names to all your input to the definition, giving variable names to all your input to the definition in the defin	domain ner its name contains an "s" what does the function do?) is string-contains(animal what the fu) is string-contains(animal what the fu	range A["name"], "s") action produces B["name"], "s")

end