

Word Problem: species-color

Directions : We want to generate a custom dot for our `image-scatter-plot` , such that every species gets a unique color. Write a function called `species-color` , which takes in a Row from the animals table and returns a solid, 5px circle using a color you've chosen.

Contract and Purpose Statement

Every contract has three parts...

| | | | |
|--------------------------------|---------------|----|--------------|
| # <code>species-color::</code> | Row | -> | Image |
| <i>function name</i> | <i>domain</i> | | <i>range</i> |

Consumes an animal, and produces a solid, 5px dot. (Dogs=red, Cats=blue, Tarantulas=black, Rabbits=pink, Lizards=green)

Examples

what does the function do?

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

examples:

| | | | | | |
|----------------------------|---|--------------------------|---|-----------|--|
| <code>species-color</code> | (| <code>"dog"</code> |) | is | <code>circle(5px, "solid", "red")</code> |
| <i>function name</i> | | <i>input(s)</i> | | | <i>what the function produces</i> |
| <code>species-color</code> | (| <code>"cat"</code> |) | is | <code>circle(5px, "solid", "blue")</code> |
| <i>function name</i> | | <i>input(s)</i> | | | <i>what the function produces</i> |
| <code>species-color</code> | (| <code>"tarantula"</code> |) | is | <code>circle(5px, "solid", "black")</code> |
| <i>function name</i> | | <i>input(s)</i> | | | <i>what the function produces</i> |
| <code>species-color</code> | (| <code>"rabbit"</code> |) | is | <code>circle(5px, "solid", "pink")</code> |
| <i>function name</i> | | <i>input(s)</i> | | | <i>what the function produces</i> |
| <code>species-color</code> | (| <code>"lizard"</code> |) | is | <code>circle(5px, "solid", "green")</code> |
| <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 species-color(r):  
  function name      variable(s)  
  
  if (r["species"] == "dog"): circle(5px, "solid", "red")  
    what the function does with those variable(s)  
  
  else if (r["species"] == "cat"): circle(5px, "solid", "blue")  
    what the function does with those variable(s)  
  
  else if (r["species"] == "tarantula"): circle(5px, "solid", "black")  
    what the function does with those variable(s)  
  
  else if (r["species"] == "rabbit"): circle(5px, "solid", "pink")  
    what the function does with those variable(s)  
  
  else if (r["species"] == "lizard"): circle(5px, "solid", "green")  
    what the function does with those variable(s)  
  
  end  
  
end
```