

# 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>	)	<b>is</b>	<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>	)	<b>is</b>	<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>	)	<b>is</b>	<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>	)	<b>is</b>	<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>	)	<b>is</b>	<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
```