

Check for Mistakes in this Word Problem: flower-name

Directions: You are putting together a list of flowers in your garden based on their color. You have red roses, purple tulips, and yellow daisies. Write a function that takes in the color of a flower and returns the name of the flower.

Contract and Purpose Statement

Every contract has three parts ...

<code>;</code>	<code>flower-name</code>	<code>:</code>	<code>string</code>	<code>→</code>	<code>string</code>
	<hr/>		<hr/>		<hr/>
	<i>function name</i>		<i>domain</i>		<i>range</i>

<code>;</code>	<code>Takes the name of the flower and returns its color</code>
	<hr/>
	<i>what does the function do?</i>

Examples

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

<code>(EXAMPLE(</code>	<code>flower-name</code>	<code>"red"</code>	<code>)</code>	<code>"rose"</code>	<code>)</code>
	<hr/>	<hr/>		<hr/>	
	<i>function name</i>	<i>input(s)</i>		<i>what the function produces</i>	

<code>(EXAMPLE(</code>	<code>flower-name</code>	<code>"tulip"</code>	<code>)</code>	<code>"purple"</code>	<code>)</code>
	<hr/>	<hr/>		<hr/>	
	<i>function name</i>	<i>input(s)</i>		<i>what the function produces</i>	

<code>(EXAMPLE(</code>	<code>flower-name</code>	<code>"yellow"</code>	<code>)</code>	<code>"daisy"</code>	<code>)</code>
	<hr/>	<hr/>		<hr/>	
	<i>function name</i>	<i>input(s)</i>		<i>what the function produces</i>	

Definition

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

<code>(define(</code>	<code>flower-name</code>	<code>color</code>	<code>)</code>
	<hr/>	<hr/>	
	<i>function name</i>	<i>variables</i>	

<code>(cond</code>	<hr/>
<code>[(string=? color "red")</code>	<code>"rose"</code>
<hr/>	<hr/>
<code>[(string=? color "purple")</code>	<code>"tulip"</code>
<hr/>	<hr/>
<code>[(string=? color "yellow")</code>	<code>"daisy"</code>
<hr/>	<hr/>
<code>[else</code>	<hr/>
<code>"That flower isn't in the garden!"</code>	<code>)])</code>
<hr/>	<hr/>