

# Code Reading

Below is the code for an animation of a character walking back and forth across a screen. Without contracts or comments, can you tell which of the functions handle...

Defining the data structure: \_\_\_\_\_

Drawing the animation: \_\_\_\_\_

Updating the animation state: \_\_\_\_\_

Responding to keypresses: \_\_\_\_\_

A	<pre><b>data</b> WalkState:     walk(x :: Number,          direction :: Number) <b>end</b></pre>
B	<pre><b>fun</b> next-state-tick(w):   <b>if</b> w.x &gt; (WIDTH - 50): walk(w.x - 4, w.direction * -1)   <b>else if</b> w.x &lt;= 50: walk(w.x + 4, w.direction * -1)   <b>else</b>: walk(w.x + w.direction, w.direction)   <b>end</b> <b>end</b></pre>
C	<pre><b>fun</b> next-state-key(w, key):   <b>if</b> string-equal(key, "r"): walk(75, 3)   <b>else if</b> string-equal(key, "right"):     walk(w.x + 50, w.direction)   <b>else if</b> string-equal(key, "left"):     walk(w.x - 50, w.direction)   <b>else</b>: w   <b>end</b> <b>end</b></pre>
D	<pre><b>fun</b> draw-state(w):   put-image(CHARACTER-IMG, w.x, 150, BACKGROUND) <b>end</b></pre>