

Syntax and Style Bug-Hunting: Piecewise Edition

	Buggy Code	Correct Code / Explanation
Round 1	<pre> fun piecewisefun(n): if (n > 0): n else: 0 </pre>	<p>No 'end' statements</p> <pre> fun piecewisefun(n): if (n > 0): n else: 0 end end </pre>
Round 2	<pre> fun cost(topping): if string-equal(topping, "pepperoni"): 10.50 else string-equal(topping, "cheese"): 9.00 else string-equal(topping, "chicken"): 11.25 else string-equal(topping, "broccoli"): 10.25 else: "That's not on the menu!" end end </pre>	<p>Need to use 'else if' for all but the final condition</p> <pre> fun cost(topping): if string-equal(topping, "pepperoni"): 10.50 else if string-equal(topping, "cheese"): 9.00 else if string-equal(topping, "chicken"): 11.25 else if string-equal(topping, "broccoli"): 10.25 else: "That's not on the menu!" end end </pre>
Round 3	<pre> fun absolute-value(a b): if a > b: a - b b - a end end </pre>	<p>No 'else' statement before final condition</p> <pre> fun absolute-value(a b): if a > b: a - b else: b - a end end </pre>
Round 4	<pre> fun best-function(f): if string-equal(f, "blue"): "you win!" else if string-equal(f, "blue"): "you lose!" else if string-equal(f, "red"): "Try again!" else: "Invalid entry!" end end </pre>	<p>First and second condition are the same (This program will run, but the second condition will never be evaluated)</p> <pre> if string-equal(f, "blue"): "you win!" else if string-equal(f, "green"): "you lose!" </pre>