

Mission 7 - Line Sensors Review Questions

Which of the following is NOT used in a line sensor reading?	<ul style="list-style-type: none"> a. Emitter b. Detector c. Constant d. Reflector
A line sensor reading returns higher values when _____ light is reflected.	<ul style="list-style-type: none"> a. More b. Less c. Consistent d. Variable
What value is returned by the line sensor reading?	<ul style="list-style-type: none"> a. 0 or 1 b. True or False c. An integer between 0 and 100 d. An integer between 0 and 4095
What code reads the line sensor?	<ul style="list-style-type: none"> a. <code>left = ls.read(1)</code> b. <code>left.ls_read()</code> c. <code>left[1] = ls.read()</code> d. <code>ls.read[1, 2]</code>
What will print, given this code: <pre>left = 5 right = 6 print(left, right, sep=',')</pre>	<ul style="list-style-type: none"> a. 5 6 b. 5,6, c. 5,6 d. Causes an error
What does the if statement evaluate to? <pre>number = 15 if 10 < number < 20:</pre>	<ul style="list-style-type: none"> a. Invalid comparison b. 15 c. True d. False
What is the purpose of the break statement?	<ul style="list-style-type: none"> a. Stops the program b. Exits to the operating system c. Moves to the next part of an if statement d. Breaks out of the nearest loop
Where is the best place to define a constant?	<ul style="list-style-type: none"> a. Near the top, under the imports b. After the functions c. Just before the while True: statement d. Just after the while True: statement
What is the value of x? <pre>x = abs(10-15)</pre>	<ul style="list-style-type: none"> a. -5 b. 5 c. 25 d. -25
What is the correct code for getting input from the user?	<ul style="list-style-type: none"> a. <code>input("Enter direction")</code> b. <code>dir = input("Enter direction")</code> c. <code>dir.input("Enter direction")</code> d. <code>dir = console.input("Enter direction")</code>
Given the code, what is the value of number?	<ul style="list-style-type: none"> a. 4 b. 8 c. 3 d. 7

<pre>matrix = [[1, 2, 3, 4], [5, 6, 7, 8], [9, 0, 1, 2]] number = matrix[1, 3]</pre>	
<p>What is the purpose of the return statement?</p>	<ul style="list-style-type: none">a. Exits the loopb. Assigns the value of the line sensorc. Exits a function and returns a value, if one is givend. Returns a value but remains in a function
<p>What is the correct code for calling a function with a return?</p>	<ul style="list-style-type: none">a. get_name()b. def get_name():c. call get_name()d. the_name = get_name()
<p>What does this code do?</p> <pre>sensor_data = [['N', 3557], ['E', 286], ['S', 1391], ['W', 2481]] left = 2481 def find_name(left): for d in sensor_data: if abs(left - d[1]) < MIN_DIFF: return d[0]</pre>	<ul style="list-style-type: none">a. Searches the matrix and returns 'W'b. Searches the matrix and returns 2481c. Searches the matrix and returns 3d. Fails to find any match in the matrix
<p>What is printed by the code:</p> <pre>x = 5 y = 12 if 10 < x < 20: if y > 10: print("ONE") else: print("TWO") else: print("THREE")</pre>	<ul style="list-style-type: none">a. ONEb. TWOc. THREEd. ONE and then THREE