

Mission 8 - Boundary Patrol Review Questions

Select the computer science definition of: PARAMETER	a. A named variable that is listed in a function definition b. An Operator used to compare multiple conditions c. Variables defined outside a function d. A value passed when a function is called
Select the computer science definition of: ARGUMENT	a. A named variable that is listed in a function definition b. An Operator used to compare multiple conditions c. Variables defined outside a function d. A value passed when a function is called
When a line sensor's reading returns a higher value, it is on a _____ surface	a. Light or reflective b. Dark or non-reflective c. Variable d. Uneven
Given the code, what will be printed? <pre>threshold = 2 for i in range(4): if i > threshold: break print(i, end=' ')</pre>	a. 0 b. 0, 1, 2, c. 0, 1, 2, 3, 4 d. Infinite loop, won't stop
Given the code, how many times will the loop print a value? <pre>num = 0 while num < 5: val = ls.read(2) print(val) sleep(1)</pre>	a. 5 b. 2 c. 1 d. Infinite loop, won't stop
Identify the default parameter: <pre>def go(left, right, delay=0.5): motors.run(LEFT, left) motors.run(RIGHT, right) sleep(delay) go(50, 50)</pre>	a. left b. delay=0.5 c. LEFT d. 50
What is the result of the function call? <pre>def go(left, right, delay=0.5): motors.run(LEFT, left) motors.run(RIGHT, right) sleep(delay) go(50, 50)</pre>	a. Nothing happens; missing argument b. CodeBot moves backward for 0.5 seconds c. CodeBot moves forward for 0.5 seconds d. CodeBot turns for 0.5 seconds

<p>Identify the positional argument:</p> <pre>def fun(num1, num2=4): print(num1, num2, sep=', ')</pre> <p>fun(3, num2=6)</p>	<ul style="list-style-type: none"> a. 4 b. 3 c. num2=6 d. num1
<p>Identify the keyword argument:</p> <pre>def fun(num1, num2=4): print(num1, num2, sep=', ')</pre> <p>fun(3, num2=6)</p>	<ul style="list-style-type: none"> a. 4 b. 3 c. num2=6 d. num1
<p>What is the result of the function call:</p> <pre>def fun(num1, num2=4): print(num1, num2, sep=', ')</pre> <p>fun(3, num2=6)</p>	<ul style="list-style-type: none"> a. 3,4 b. 3,6 c. 3, num2=6 d. Error, function call not correct
<p>What is the result of the function call:</p> <pre>def fun(num1, num2=4): print(num1, num2, sep=', ')</pre> <p>fun(1)</p>	<ul style="list-style-type: none"> a. 1, b. 1,4 c. 1,1 d. Error, function call not correct
<p>What code defines an empty list?</p>	<ul style="list-style-type: none"> a. my_list = [] b. my_list = () c. my_list.new() d. new_list(my_list)
<p>What code will add an item to a list?</p>	<ul style="list-style-type: none"> a. my_list.add(val) b. my_list(val) c. my_list[val] d. my_list.append(val)
<p>What is returned by this function:</p> <pre>def scan_lines(): sensors = [] for i in range(5): val = ls.read(i) is_line = val < threshold sensors.append(is_line) return sensors</pre>	<ul style="list-style-type: none"> a. A Boolean value: True or False b. An integer: the line sensor reading c. A list of 5 Boolean values d. A list of 5 integer readings

What is the result of the code:

```
vals=[True, True, False, False, False]
if any(vals):
    brake()
    if vals[0] and not vals[4]:
        back_turn(30)
    elif vals[4] and not vals[0]:
        back_turn(-30)
    else:
        back_turn()
```

- a. The 'bot will brake and then back_turn(30)
- b. The 'bot will brake and then back_turn(-30)
- c. The 'bot will brake and then back_turn()
- d. Nothing will happen