

Mission 11 - Airfield Ops Review Questions

<p>Select the computer science definition of: INCREMENT</p>	<ul style="list-style-type: none"> a. A short way of writing a common expression b. Subtracting one from a variable c. Adding one to a variable d. Getting the integer remainder of a division problem
<p>Select the computer science definition of: DECREMENT</p>	<ul style="list-style-type: none"> a. A short way of writing a common expression b. Subtracting one from a variable c. Adding one to a variable d. Getting the integer remainder of a division problem
<p>What does this expression evaluate to? <code>3 // 2</code></p>	<ul style="list-style-type: none"> a. 1 b. 2 c. 1.5 d. 2/3
<p>What does this expression evaluate to? <code>8 % 5</code></p>	<ul style="list-style-type: none"> a. 1.6 b. .6 c. 3 d. 1
<p>What does this expression evaluate to? <code>2**3</code></p>	<ul style="list-style-type: none"> a. 6 b. 8 c. 9 d. .66667
<p>What is the correct code for detecting a white line?</p>	<ul style="list-style-type: none"> a. <code>vals = ls.check(2000, True)</code> b. <code>vals = ls.check(2000, False)</code> c. <code>vals = ls.check(2000)</code> d. <code>vals = ls.read(2000, True)</code>
<p>What variable is used to track the state of the line sensor detection?</p>	<ul style="list-style-type: none"> a. <code>was_line = False</code> b. <code>was_line = 0</code> c. <code>count = True</code> d. <code>count = 0</code>
<p>What variable is used to keep track of the number of lines crossed?</p>	<ul style="list-style-type: none"> a. <code>was_line = False</code> b. <code>was_line = 0</code> c. <code>count = True</code> d. <code>count = 0</code>
<p>Which is an example of an augmented assignment?</p>	<ul style="list-style-type: none"> a. <code>count += 1</code> b. <code>lites = [True] * number</code> c. <code>[ls.read(i)>2000 for i in range(5)]</code> d. <code>count = count + 1</code>
<p>Given this code, what is printed?</p> <pre> is_line = True was_line = False if is_line and not was_line: print('Detected') else: print('Not detected') was_line = is_line </pre>	<ul style="list-style-type: none"> a. Nothing is printed b. Detected c. Not detected d. An error occurs

<p>Given this code, what is the final value of <code>was_line</code>?</p> <pre>is_line = True was_line = False if is_line and not was_line: print('Detected') else: print('Not detected') was_line = is_line</pre>	<ul style="list-style-type: none">a. Trueb. Falsec. Noned. 2
<p>Given this code, what will be the result of the if statement?</p> <pre>count = 16 remainder = count % 8 if remainder == 0: spkr.pitch(440) elif remainder == 3: spkr.off()</pre>	<ul style="list-style-type: none">a. Speaker turns onb. Speaker turns offc. Speaker turns on and then offd. Nothing; neither condition is True
<p>Given this code, what will be the result of the if statement?</p> <pre>count = 18 remainder = count % 8 if remainder == 0: spkr.pitch(440) elif remainder == 3: spkr.off()</pre>	<ul style="list-style-type: none">a. Speaker turns onb. Speaker turns offc. Speaker turns on and then offd. Nothing; neither condition is True
<p>Given this code, what is the result of the if statement?</p> <pre>count = 8 next_marker = 3 marker_dash = 2**next_marker if count == marker_dash: leds.prox(3) elif count == marker_dash + 3: leds.prox(0) next_marker += 1</pre>	<ul style="list-style-type: none">a. Nothing happens, no condition is trueb. Proximity sensors turn onc. Proximity sensors turn off and next_marker is incrementedd. Proximity sensors turn on and next_marker is decremented

<p>Given this code, what is the result of the if statement?</p> <pre> count = 11 next_marker = 3 marker_dash = 2**next_marker if count == marker_dash: leds.prox(3) elif count == marker_dash + 3: leds.prox(0) next_marker += 1 </pre>	<ul style="list-style-type: none"> a. Nothing happens, no condition is true b. Proximity sensors turn on c. Proximity sensors turn off and next_marker is incremented d. Proximity sensors turn on and next_marker is decremented
<p>Given this code, what will be printed?</p> <pre> new_list = [True] * 4 print(new_list) </pre>	<ul style="list-style-type: none"> a. [True] * 4 b. [True] [True] [True] [True] c. [True, True, True, True] d. An error occurs
<p>Given this code, which leds are turned on?</p> <pre> new_list = [True] * 2 leds.ls(new_list) </pre>	<ul style="list-style-type: none"> a. Line sensor LEDs 0, 1 b. Line sensor LEDs 4, 5 c. Line sensor LED 2 d. An error occurs
<p>What code turns on LEDs using a Boolean list as the argument?</p>	<ul style="list-style-type: none"> a. leds.prox(0b11) b. leds.user(0) c. leds.ls(vals) d. leds.prox(3)
<p>What code turns on LEDs using a binary string as the argument?</p>	<ul style="list-style-type: none"> a. leds.prox(0b11) b. leds.user(0) c. leds.ls(vals) d. leds.prox(3)
<p>What code turns on LEDs using an integer as the argument?</p>	<ul style="list-style-type: none"> a. leds.prox(0b11) b. leds.user(0) c. leds.ls(vals) d. leds.prox(3)