

Mission 8 Review Kahoot Questions

<p>What are the three states of the mission, in order?</p>	<ul style="list-style-type: none"> a. lift-off, journey, land b. init, prepare, and landed c. prepare, init, landed d. morning, afternoon, night
<p>What does this code do? <code>power.enable_periph_vcc(True)</code></p>	<ul style="list-style-type: none"> a. Provides a boost of power b. Sets up the NeoPixel ring c. Starts the servo d. Boosts the input of an object sensor
<p>What does this code do? <code>set_lighting((0, 0, 0))</code></p>	<ul style="list-style-type: none"> a. Turns on all pixels of the NeoPixel ring b. Causes an error in the program c. Uses a list to turn off all pixels d. Uses a tuple to turn off all pixels
<p>What type of peripheral is an object sensor?</p>	<ul style="list-style-type: none"> a. Digital input b. Digital output c. Analog input d. Analog output
<p>Which statement about an object sensor is FALSE?</p>	<ul style="list-style-type: none"> a. It emits an IR light. b. It detects reflected IR energy with a phototransistor. c. It can read distances from 0 to 2** 15 mm. d. It outputs True for detected and False for not detected.
<p>What values does the object sensor return?</p>	<ul style="list-style-type: none"> a. An integer from 0 to 65535 b. False for detected and True for not detected c. True for detected and False for not detected d. 1 for detected and 0 for not detected
<p>What is one thing the object sensor CANNOT detect?</p>	<ul style="list-style-type: none"> a. Pulses as an object passes by b. Motion 10 feet away c. A black line on a white background d. Close objects
<p>How can you boost the input of an object sensor?</p>	<ul style="list-style-type: none"> a. Change the default pull to None b. Change the default pull to Pull.UP c. Change the default pull to Pull.DOWN d. Use the potentiometer
<p>Why does the input of an object sensor need a boost?</p>	<ul style="list-style-type: none"> a. It has a very weak High value b. It has a High value that is too strong c. It has a very weak Low value d. It has a Low value that is too strong
<p>What is a reason for applying a finite-state machine to the lander?</p>	<ul style="list-style-type: none"> a. It is the easiest way to write code. b. It avoids repetitive code. c. It requires fewer constants and variables. d. It avoids extra processor effort when modifying code.
<p>What values does the microswitch return?</p>	<ul style="list-style-type: none"> a. 0 for pressed and 1 for not pressed b. An integer from 0 to 65535 c. True for not pressed and False for pressed d. False for not pressed and True for pressed

<p>Which peripheral is needed to turn the landing gear?</p>	<ul style="list-style-type: none"> a. 180 servo b. 360 servo c. Potentiometer d. NeoPixel ring
<p>Fill in the missing code:</p> <pre># Main program # Initialize the first state lander_state = _____ set_lighting(RGB_YELLOW) landing_gear.duty_cycle = set_servo(RETRACTED) sleep(1)</pre>	<ul style="list-style-type: none"> a. 'prepare' b. 'init' c. 'landed' d. 'morning'
<p>Fill in the missing code for "A":</p> <pre>if lander_state == 'init': if ground_sensor.value == _____ A _____ : lander_state = 'prepare' set_lighting(RGB_RED) landing_gear.duty_cycle = set_servo(_____ B _____)</pre>	<ul style="list-style-type: none"> a. EXTENDED b. RETRACTED c. TOUCHDOWN_DETECTED d. GROUND_DETECTED
<p>Fill in the missing code for "B":</p> <pre>if lander_state == 'init': if ground_sensor.value == _____ A _____ : lander_state = 'prepare' set_lighting(RGB_RED) landing_gear.duty_cycle = set_servo(_____ B _____)</pre>	<ul style="list-style-type: none"> a. EXTENDED b. RETRACTED c. TOUCHDOWN_DETECTED d. GROUND_DETECTED