

Mission 3 Review Kahoot Questions

Definition of "ANALOG"	<ul style="list-style-type: none"> <li>a. A binary peripheral with two states – True or False</li> <li>b. on/off pulses are sent at a constant rate, set by the duty cycle</li> <li>c. converts an analog measurement to a digital value</li> <li>d. A peripheral with a range of integer values</li> </ul>
Definition of "DIGITAL"	<ul style="list-style-type: none"> <li>a. A binary peripheral with two states – True or False</li> <li>b. on/off pulses are sent at a constant rate, set by the duty cycle</li> <li>c. converts an analog measurement to a digital value</li> <li>d. A peripheral with a range of integer values</li> </ul>
Definition of "ADC"	<ul style="list-style-type: none"> <li>a. A binary peripheral with two states – True or False</li> <li>b. on/off pulses are sent at a constant rate, set by the duty cycle</li> <li>c. converts an analog measurement to a digital value</li> <li>d. A peripheral with a range of integer values</li> </ul>
Definition of "PULSE WIDTH MODULATION"	<ul style="list-style-type: none"> <li>a. A binary peripheral with two states – True or False</li> <li>b. on/off pulses are sent at a constant rate, set by the duty cycle</li> <li>c. converts an analog measurement to a digital value</li> <li>d. A peripheral with a range of integer values</li> </ul>
Which function will delay code using milliseconds?	<ul style="list-style-type: none"> <li>a. delay_ms()</li> <li>b. sleep()</li> <li>c. sleep_us()</li> <li>d. sleep_ms()</li> </ul>
How many milliseconds are in one second?	<ul style="list-style-type: none"> <li>a. 100</li> <li>b. 1,000</li> <li>c. 10,000</li> <li>d. 1,000,000</li> </ul>
What is an example of a 75% duty cycle?	<ul style="list-style-type: none"> <li>a. The LED is on for .25 out of every second</li> <li>b. The LED is on for .50 out of every second</li> <li>c. The LED is on for .75 out of every second</li> <li>d. The LED is dim for .75 of every second</li> </ul>
What is the purpose of this code? <code>led = exp.pwm_out(exp.PORT0)</code>	<ul style="list-style-type: none"> <li>a. Set up the LED as a digital output peripheral</li> <li>b. Set up the LED as a pwm output peripheral</li> <li>c. Set up the LED as a pwm input peripheral</li> <li>d. Set up the LED as an analog output peripheral</li> </ul>
When the LED is set up as PWM, what is the value for LED_OFF?	<ul style="list-style-type: none"> <li>a. LED_OFF = False</li> <li>b. LED_OFF = 2**10</li> <li>c. LED_OFF = 0</li> <li>d. LED_OFF = True</li> </ul>
When the LED is set up as PWM, what code will assign it a value?	<ul style="list-style-type: none"> <li>a. led.value = val</li> <li>b. value.led = val</li> <li>c. led(duty_cycle)</li> <li>d. led.duty_cycle = val</li> </ul>
What type of peripheral is a potentiometer?	<ul style="list-style-type: none"> <li>a. Analog input</li> <li>b. Digital input</li> <li>c. Analog output</li> <li>d. PWM output</li> </ul>

What type of peripheral is a motion sensor?	<ul style="list-style-type: none"><li>a. Analog input</li><li>b. Digital input</li><li>c. Analog output</li><li>d. PWM output</li></ul>
What are the possible values for the motion sensor?	<ul style="list-style-type: none"><li>a. True and False</li><li>b. All positive integers</li><li>c. 0 and 1</li><li>d. 0 to 2<sup>16</sup></li></ul>
What code returns the number of milliseconds since reboot?	<ul style="list-style-type: none"><li>a. time.sleep()</li><li>b. time.sleep_ms()</li><li>c. time.ticks()</li><li>d. time.ticks_ms()</li></ul>
The following code is an example of: <pre>while True:     if motion_sensor.value == MOTION_DETECTED:         turn_off_time = time.ticks_ms() + ON_TIME         while time.ticks_ms() &lt; turn_off_time:             set_led(potentiometer.value)</pre>	<ul style="list-style-type: none"><li>a. Branching</li><li>b. Abstraction</li><li>c. Nested loop</li><li>d. Setting up a peripheral</li></ul>