CodeAIR Mission 7 Assignment	**Name:** 
Pre-Mission Preparation	
What do you remember about blocking functions? Give an example.	Answers can vary. Blocking functions don't let other code run until the task is completed. An example is sleep(). No code will run until the sleep() is over.
What do you remember about non-blocking functions? Give an example.	Answers can vary. A non-blocking function starts its task but also continues the code so other tasks can be executed. An example is fly.start_forward(). It will start the drone flying forward and then move to the next instruction. It needs another function call to stop it flying forward.
Mission 7 Checks – Multitasking	
Objective #1 What does "sequentially" mean?	Running the code one statement at a time, in order.
Click on scheduler. What does the task scheduler let you do?	It lets you run functions periodically.
What type of tasks can be scheduled?	All task functions must be non-blocking, with no sleeping.
What StateMachine function is used to register a callback function?	sm.add_task(callback, interval)
What is the difference between **pixels.off** and **pixels.off()**?	pixels.off is the name of the function, pixels.off() calls the function. To register a callback function, you must give the name but not call it.
Objective #2 How do you add another task to the scheduler?	Define another function and then add another sm.add_task() command.
Objective #3 What are some common scheduling blockers?	A long time.sleep() call, waiting for input, performing very complex calculations on a large data set.
What will the StateMachine do if a task takes too long?	It will print a debug warning if a task runs for longer than 50 ms (sm.TASK_WARNING_THRESHOLD)
Use CodeTrek to add code to your program. Before you run the code, predict what you think will happen.	Prediction: (Answers will vary) Lights won't blink during their scheduled time.
Objective #4 How do you turn a blocking function like speaker.beep() into a non-blocking function?	Start the beep without blocking (don't give an interval). Then schedule a speaker.off .
What function will run a function just once after a specific delay?	sm.schedule

Objective #5 How do you make a sensor check non-blocking?	Use the optional argument wait=False
What is the exception to the non-blocking sensor check?	The first call to get_data() is called with new log_items. The function will block while registering to receive those items from the flight controller.
Post-Mission Reflection	
A lot of new coding concepts were introduced during this lesson. List at least three new things you learned or used in your program.	1. 2. 3.
How do you think you will use these concepts and coding functions in future missions?	Answers will vary.