ANSWER KEY

CODEBOT MISSION 5 LOG - Lesson 4

Pre-Mission Warm-Up	
What code will move the 'bot forward?	motors.enable(True) motors.run(LEFT, 50) motors.run(RIGHT, 50) Speed can be any power, but both should be the same.
What code will move the 'bot backward?	motors.run(LEFT, -30) motors.run(RIGHT, -30) Speed can be any power, but both should be the same and negative.
What code will turn the 'bot?	motors.run(LEFT, 30) motors.run(RIGHT, -30) Speed can be any power, but both should be the same, with one positive and one negative.
Mission 5 Lesson 4 – Fence Patrol	
Mission 5 Objective 9	
Write the code for the go_forward() function.	def go_forward(): motors.run(LEFT, 45) motors.run(RIGHT, 45)
What is the algorithm for the back_turn() function?	1. Move backward (same negative speed) 2. Wait with a sleep command 3. Turn (same but opposite speeds) 4. Wait with a sleep command
Where do you call the go_forward() function?	In the else: block, added to the if hit: block.
Where do you call the back_turn() function?	In the if hit: block, just before incrementing the counter variable
Post-Mission Reflection	
How do functions help manage the program code for the fence patrol?	Answers will vary. Some points that could be mentioned: • Functions organize the code into named chunks, making it easier to read and maintain. • The if hit: block of code is easier to read and shorter when it calls functions instead of including all the code for movement. • The functions that read the line sensor enable the code to be reused without a copy and paste. • It is easier to change a value in the function because they are near the top and easy to find.