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| **Mission 5 Assignment** | **Name:** |
| **Pre-Mission Preparation** | |
| Algorithms are a part of everyday life. They are step-by-step instructions to complete a task.  Think about daily activities that you do. Select one task and write the algorithm for the task: |  |
| **Mission 5 Checks** | |
| Objective #1  What is the purpose of a loop?  What is the purpose of a variable? |  |
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| Objective #2  Give at least two strategies for debugging code? |  |
| Objective #3  How is a for loop different from a while loop? |  |
| Objective #4  What is the code for turning on an LED using the for loop counter? |  |
| Objective #5  Write the first line of a for loop that counts backwards: |  |
| Objective #6  Write the first line of a function definition:  Write a call to the function: |  |
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| Objective #7  Write the code for a loop that waits for a button press before calling functions: |  |
| Objective #8  What additional function is needed to move the CodeBot around the dance floor?  What parameters does the function need? |  |
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| **Post-Mission Reflection** | |
| What is a challenge you had with this mission? How did you overcome the challenge? |  |
| Abstraction is used in daily life and in many applications. Abstraction is a key concept of computer science. Functions are a form of abstraction because they can hide the details of how a task is accomplished, which enables a problem to be simplified and to focus on the parts that need attention. Give an example of abstraction in your daily life: |  |