## **AP CSP Python with Robots For Loop Practice Assignment** Name: Introduction During this assignment, you will apply for loops by modifying three previous programs. You will also add a list of tuples and traverse the list to play a song. Warm-Up Reflect on the programs you created and modified during this unit. How is a for loop similar to a while Answers will vary. Answers can include: they both are forms of iteration, loop? they both have a counter-type variable used in the condition to control the iteration, they both perform tasks in the iteration block. How is a for loop different from a Answers will vary. The answer should include that the for loop counter is while loop? built-in to the structure and doesn't need to be defined in advance. It automatically increments. It has a range. **Examples and Challenge** Notes for example #1 Use this space to take notes about the code for example #1. Use this space to take notes about Notes for example #2 the code for example #2. Use this space to take notes about Notes for example #3 the code for example #3. Use this space to take notes about Notes for example #4 the code for example #4. What remix project did you select for Answers will vary. They could have modified Remix 1, Remix 2 or Remix 3. the challenge? How did you modify This was a challenge, so all students might not have gotten this far. the program? Wrap-Up A list that you can't change; it is immutable. Defined with parenthesis (). What is a tuple? When will a for loop be used in Use a for loop when you want to repeat a block of code and you know in code? advance how many times it will repeat; you know the range. What is something you learned Answers will vary. during this lesson? During this lesson you modified the LineSense, WhatIf and SweepLEDs programs. For the challenge you modified

a remix project. Submit the required programs to the teacher.