AP CSP Python with CodeX **PT Practice #1 Activity Guide**	**Name:**
Introduction	
During this assignment, you will create a practice Performance Task project.	
Warm-Up	
This program will build on the concepts and program from Mission 3: Pixels1_matrix Open the program in CodeSpace. What does this program do?	Answers will vary. Possible answer: • The program traverses a matrix, or list of lists, that holds information about pixel colors and brightness. The user can select between two lists. While traversing the list, the CodeX displays a light show.
PT Practice #1	
What are the requirements for the Create PT Project?	Answer should include: • A list is created • Information in the list is used • A function with a parameter • The parameter is used in an if statement • The function has a loop and an if statement
What requirements does Pixels1_matrix already fulfill?	Answer should include: • Creates a list • Uses the list in a meaningful way • Has a function with a parameter • Function has a loop
What requirements does Pixels1_matrix lack?	Answer should include: • The parameter needs to affect function execution • The function needs an if statement
What are some ways you can modify the program to meet all the Create PT requirements?	Answers will vary. Independent or group brainstorming.
Use this space to take notes as you modify the program.	Notes as needed
What other modifications can you think of for the Pixels1 program?	Answers will vary. Independent or group brainstorming.
Wrap-Up	
What modifications did you make to the program so that it meets all the Create PT requirements?	Answers could include: • Added another list • Changed the parameter to choice

	• Used the matrix in pixels.set() • Use the parameter choice to select a list • Changed the main program to have a button press for input
A potential question during the AP Exam is about the parameter and how it affects the functionality of the program. Think about how it is used in the if statement. Write two function calls that cause different parts of the function to execute. You can use the actual function calls in your code, or come up with different calls. This question is all about testing.	Possible answer: First function call: turn_pixels(1) This causes the if branch of the statement to execute, and the first list is assigned to the_list, and then used in the for loop to traverse the list. Second function call: turn_pixels(2) This causes the else branch of the statement to execute, and the second list is assigned to the_list, and then used in the for loop to traverse the list.
During this lesson you created a new program: PT_Practice1. Copy and paste a link to your code: *Student goes to File-Share File and then pastes the link here.*	