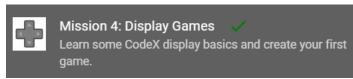Name:

Mission 4 Assignment – Display Games

Learn some CodeX display basics. Use the CodeX's NeoPixels and push-buttons to create your first game. We're jumping in head-first with some real Python coding. Mission Reminders.

Mission 4: Display Games ✓
Learn some CodeX display basics and create your first game.

You will create quite a bit of code during this lesson. When you encounter an error, make a note of what is happening and **document your debugging process** in the table below.

1. Complete Objective #1. Click on the wrench for "argument".

What does "argument" mean?	

2. Complete Objective #2. Click on the wrench for "Type" and "String".

Give a fact about variable types:	
What are the three variable types discussed?	
What is a "string"?	

3. Complete Objective #3, Objective #4. Read ALL the information for the objective!

What built-in function will convert any value to a string?	
What built-in function will convert any value to an integer (if possible)?	

4. Complete the Quiz and Objective #5. Read ALL the information for the objective.

What vocabulary word (from mission 3) explains why only the 2nd text appears on the screen?	

5. Complete Objective #6, the Quiz and Objective #7. Click on "branching" and "boolean" and "indented"

Give a fact about branching.	
Give a fact about boolean:	
Give a fact about indenting:	

6. Complete Objective #8. This step uses the simulator, not the CodeX.

7. Complete Objective #9. Back to the CodeX and modify your code.

8. Complete the Quiz and Objective #10. You will create a game!

After you create a working game that asks the user to press 4 buttons, paste a snippet of your code:

EXTENSIONS
Still have time? Make modifications to your code. Come up with your own idea, or try one of these:
- Fill the screen with red or green (or a short sleep) in additional to changing a pixel
- Add an image at the end of the game
- Display an image after each challenge for a short sleep before asking for the next button
- Add a counter and display a winning or losing message or image

Debugging Table

As you create code, you will make mistakes. Keep track of the mistakes in the table below. Doing so will help you become a more confident programmer. Add rows to the table as needed.

Error message that is displayed	Actual bug	How you fixed it

SUCCESS CRITERIA:
- ❏ Define and use an argument in a function call
- ❏ Understand and use variable types, converting types when needed

❏ Use a Boolean condition in an if..then statement
❏ Receive input from the user through a push-button
❏ Program a push-button to make a fast-click game.
❏ Debug any errors in the code and keep a debugging table
❏ Write a program, run it, and save it to the CodeX