

Name:

## Mission 8 Assignment – Answer Bot

In this project you will create a random answer generator. Instead of selecting messages yourself, like in the previous project, this time you'll have the computer decide for you!



Mission 8: Answer Bot ✓

Use a list to create a random answer generator.

You will create 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. Read the introduction and complete Objective #1. You will get an error.

What is the error?	
What is one way to fix the error?	

2. Objective #2 and Objective #3 and then answer the question.

What does <i>scale=3</i> do?	
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3. Complete Objective #4 and Objective #5. Try to do the code for #5 without help from CodeTrek.

4. Complete the Quiz and Objective #6. Try to do the code for #6 without help from CodeTrek.

5. Complete Objective #7.

### EXTENSION #1:

Using a different button (not A) program a “kill switch” to end the program.

### EXTENSION #2:

Define and call a function that displays the random colors in the pixels.

### CHALLENGE #1:

Your function contains a lot of duplicated code. Create a loop that contains the instructions one time each with a counter for the condition. Don't forget to increment the counter. You can use the flowchart below as a hint for this challenge.

### CHALLENGE #2:

Your answers list only contains text. You learned in Mission 7 that you can determine the type of a variable. Add built-in images to your list. Then modify your code to print the strings and display the images.

### CHALLENGE #3:

You can add your own images to make your Answer Bot really cool. Use the [slides on working with JPG images](#) or the [document of JPG images](#) to prepare JPG images for the CodeX. Then create another list in your program and add some of your own JPG images. Write code so that when button B was pressed, a random image from your second list is displayed. (If necessary, you will need to make a different button as the kill switch.)

To turn in the assignment, download your code (FILE-DOWNLOAD), which will be a text file. Add your name in the filename. Then submit the file through Google Classroom or the class LMS.

## 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:

- Program the buttons to print a random number.
- Modify the code to print a random message from a list of possible answers.
- Create a function that randomly assigns a color to each of the four neoPixels.

Flowchart for Challenge #1:

(see below)

