Peer review assignment. In order to get credit you must fulfill the following components:

- 1. Submit your project to gradescope on time
- 2. Also post on github and email Professor Huang the link to the repository, also on time.
- 3. For each of your two <u>peers</u> make a copy of this spreadsheet and fill in using instructions below. You get credit if you follow all instructions. This includes providing **specific** feedback on **every category**, and checking that their **code runs**.
- 4. You will submit on Gradescope two PDFs one for each peer (see notes below about converting this to PDF)
- 5. Also upload your PDF to this link. Name your PDF like "row2 peer17.pdf" if you reviewed the submission on row2 and your peer number is 17.

**Instructions:** For each question give a score (column C) using the scale below, and for each score, provide feedback on what they did well or could improve (1 sentence per question is fine). Important: for each question in column E, if they got full credit, be **specific** what they did to get full credit. If they get less than full, again be **specific** what they need to change to get full credit.

This includes running the code for code-related questions. (the ones not grayed out). If the code did not work or if you had to change something, just say what problem you saw in column D.

When complete, download as PDF (File --> Download --> PDF). Before you submit open your PDF to see if that all columns for a row are on the same page (if you drag the columns to be wider, they might not be on the same page, and I will have to ask you to resubmit).

## Scale for column C:

- 2 Satisfactory: This is approximately equivalent to "B" work, where the thought process is logical and justified for most answers, even if not all answers are correct
- 1 Progressing: This work may not be correct and not all answers are logically justified, but the work shows thoughtful engagement with the assignment.
- 0 Incomplete: This would describe missing or hastily performed work that shows little effort.

	Assignment requirements	Score (0, 1, 2)	Did code work/ what problems arose	Explanation of score and suggestions/feedback
Part 2	2.1: Include the contents of Part 2. You must address all comments where you lost points. You do not need to get a perfect score on Part 2 to get a Satisfactory grade on this project but you must work to address all comments.	2		Project part 2 was included.
	2.2: At the end of Part 2, include a summary of what you improved from the previous submission.	n/a		This was not required for this assignment

3.1 Load and clean data	Describe steps someone can take to obtain the data files you are working with. For example, provide the link to a the paper's supplementary Excel file, and explain that you opened it in excel and then saved it as a CSV file called "frogs.csv" in the same directory as the notebook (or whatever, as long as what you instruct them to do matches what your code is so your code works). ONLY IN RARE CASES: Only if you check with Dr. Melamed first, and you have some data that requires special permission to access, or some other big hassle to access, you can do this some alternate way. Your data should be directly downloadable from the source and not your personal shared folder.	2	I copy and pasted the code you provided from the CS graduate student and it ran no problem! I then ran the code cells to create a data frame and this worked as well.	The explanation of how to obtain the file was clear and the code worked.
	Provide code to read in all relevant data files into data frames. Explain your code and why you did it that way. Show the "head" (first few lines/rows/columns) of each data frame.	2	Code to put the file into a data frame worked and I was able to see the top of the data frame with the respective headers.	The code was explained well and the data frame was presented in the code
	If any cleaning steps were needed at this point, explain these cleaning steps. Otherwise, explain how you checked that the data frames were suitable for the further analyses.	1	No cleaning steps were needed	Although no cleaning steps were needed, the project asks to provide an explanation as to how you can ensure the code is suitable for further analysis and I do not see this explanation
3.2: Describe data numerically	Provide code to obtain the shape of the data files.  Describe how this shape relates to the number of observations and the number of features. Be precise, such as "This data frame has 6000 rows which is the number 500 mice times the 2 treatments times the 6 time points per treatment".	2	Code worked for this	The explanation of what the shape tells you about the data frame was thorough and made sense with respect to the research questions the paper is trying to answer
	Feature 1: Explain what you expect the "describe" function would output, based on your understanding of that features. How many observations have a recorded value of that feature and what is the average across observations?	2		Your prediction was logical based on the figures from project part 2
	<b>Feature 1</b> : Run the "describe" function and compare the results to what you predicted.	2	The code worked with the groupby and describe function	Your explanation of the results of the describe function in comparison to you expectation was good and specific
	<b>Feature 2:</b> Explain what you expect the "describe" function would output, based on your understanding of that features. How many observations have a recorded value of that feature and what is the average across observations?	2		The expectation you gave for this part was logical, and your reasoning was thorough

	Feature 2: Run the "describe" function and compare the results to what you predicted.	2	The code worked with the groupby and describe function	The code worked well, and your comments in the code explained why you did this function to get the result. Your comparison of the describe function and your expectation was good
3.3 Visualization s.	<b>Visualization 1:</b> Describe what kind of visualization you want to make, why this is appropriate for this feature and data set, and how the visualization will provide insight into the data.	2		The reasoning for using a box plot is good. This is a logical representation of the data based on the research questions.
	<b>Visualization 1</b> : Provide code and explain your code to make the visualization.	2	The code made the proper plot	The box plot was made and the axes were logical
	<b>Visualization 1</b> : Interpret the visualization: compare it to the "describe" function output from 3.2, and explain what insight into the data you can make with the visualization	2		You explained the plot well and related it to the results of the describe function.
	Visualization 1: Describe how your visualization relates to one of the hypotheses or figures from the paper.	2		You related the figure back to the hypothesis of the paper. and provided some insight to what the data in thie visual means
	<b>Visualization 2:</b> Describe what kind of visualization you want to make, why this is appropriate for this feature and data set, and how the visualization will provide insight into the data.	2		A box plot also makes sense to answer this kind of question using the data
	<b>Visualization 2</b> : Provide code and explain your code to make the visualization.	2	The code outputted the proper plot	The axes make sense and the data is clearly layed out in the visual. Your comments in the code cell are insightful
	<b>Visualization 2</b> : Interpret the visualization: compare it to the "describe" function output from 3.2, and explain what insight into the data you can make with the visualization	2		You mention the results of the describe function clearly and relate what you see in the plot to this result nicely
	Visualization 2: Describe how your visualization relates to one of the hypotheses or figures from the paper.			You related this back to the hypothesis of the paper well and supported your reasoning for wanting to make this kind of plot using this data