

**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 [peers](#) 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.

|               |   | Score (0, 1, 2) | Did code work/ what problems arose | Explanation of score and suggestions/feedback  |
|---------------|---|-----------------|------------------------------------|--|
|               | <b>Assignment requirements</b>  |                 |                                    |  |
| <b>Part 2</b> | 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               |                                    | The goal, methods, and observations and features of this paper were explained clearly. |
|               | 2.2: At the end of Part 2, include a summary of what you improved from the previous submission.   | n/a             |                                    | not needed for peer review   |

|                                       |   |     |             |   |
|---------------------------------------|---|-----|-------------|---|
| <b>3.1 Load and clean data</b>        | 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. | 1   | code worked | I was able to download the data. I had to go around a few places to access and download the data. Maybe specific sections of where to find the data can be added. |
|                                       | 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 worked | The code was straightforward and easy to follow.  |
|                                       | 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.  | n/a | n/a         | There were no cleaning steps needed for this analysis.  |
| <b>3.2: Describe data numerically</b> | 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 | The code worked but I got 19 columns instead of 16. The explanation helped to make clear what the rows and columns show.  |
|                                       | <b>Feature 1:</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 predictions helped to explain what the numbers would mean under each category.  |

|                        |   |   |             |  |
|------------------------|---|---|-------------|--|
| 3.3<br>Visualizations. | <b>Feature 1:</b> Run the "describe" function and compare the results to what you predicted.  | 2 | code worked | The predictions matched the output. Great job explaining what was informative and what wasn't.   |
|                        | <b>Feature 2:</b> Explain what you expect the "describe" function would output, based on your understanding of that feature. How many observations have a recorded value of that feature and what is the average across observations? | 2 |             | This was done in the same dataframe. Same as feature 1: The predictions helped to explain what the numbers would mean under each category. |
|                        | <b>Feature 2:</b> Run the "describe" function and compare the results to what you predicted.  | 2 | code worked | Same as feature 1: The predictions matched the output. Great job explaining what was informative and what wasn't.                          |
|                        | <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 |             | Good job. The explanation shows what to look for and explains the relationship between the two variables.                                  |
|                        | <b>Visualization 1:</b> Provide code and explain your code to make the visualization.   | 2 | code worked | The code worked perfectly, the explanations can be added to explain what the x and y are set as in the code.                               |
|                        | <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  | 1 |             | The visualization is explained to show what it is showing and how to interpret it. Comparison to the describe function is missing.         |
|                        | <b>Visualization 1:</b> Describe how your visualization relates to one of the hypotheses or figures from the paper.   | 1 |             | The explanation shows how to interpret the plot. Relating back to the hypothesis is missing.   |
|                        | <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 |             | Great description of how to interpret and shows how the variables relate.  |
|                        | <b>Visualization 2:</b> Provide code and explain your code to make the visualization.   | 2 | code worked | same as visualization 1: need to explain the code  |

|  |   |  |   |
|--|---|--|---|
| <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 | 1 |  | same as visualiztion 1: compare back to the describe function results |
| <b>Visualization 2:</b> Describe how your visualization relates to one of the hypotheses or figures from the paper.  | 1 |  | same as visualization 1: relate back to hypothesis                    |