**Shiny App Assignment:** Lab 9\_Shiny-App-Visualization\_Assignment\_V1

**GROUP MEMBERS**:

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| Name | Email |
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**ASSIGNMENT #5 ( /10)**

Upload your research project data as a .csv file to the BIOL 116 Shiny App and create an appropriate table of the raw data and corresponding figure (graph) to visualize your data. Also, create an appropriate table of the descriptive statistics based on the relationship between the two variables examined in your study.

1. In the space below, paste the table of your raw data (“tidy data”) and the corresponding figure (graph) that your group created. Make sure you follow proper data presentation guidelines for tables (including tidy data) and figures! Please note that if your table has greater than 10 rows of data, then only include the first 10 rows in the table. (7 marks)

3 marks for table

Heading placed above table (0.25 mark) and has a table number (0.25 mark): 0.5 mark

Content of heading is informative (0.25 mark) and clearly mentions sample size (0.25 mark), the variables of the study (0.25 mark) and their units (0.25 mark): total 1 mark

Horizontal lines only used for all rows of table (no vertical lines for columns): 0.5 mark

Table follows “tidy data” guidelines: 1 mark

4 marks for correct figure

-correct variables on x and y axis (2 marks)

* Two categorical variables = mosaic or barplot
* Two numeric variables = scatterplot
* One numeric and one categorical variable = stripchart (if <20 observations in each group), boxplot (if >20 observations in each group)

- figure caption that follows guidelines. At minimum the figure

* located below the figure (0.25 mark)
* includes a figure number (0.25 mark)
* clearly mentions both variables (0.25 mark) and the relationship between the variables (1 mark)
* sample size included (0.25 mark)

1. Use the Shiny App to calculate the descriptive statistics based on the relationship between the two variables examined in your study. Display these descriptive statistics in a properly formatted table in the space below. Make sure you follow proper data presentation guidelines! (3 marks)

Heading placed above table (0.25 mark) and has a table number (0.25 mark): 0.5 mark

Content of heading is informative (0.25 mark) and clearly mentions the types of descriptive statistics in the table (0.5 mark) and their units, if applicable (0.25 mark): total 1 mark

Horizontal lines only used for all rows of table (no vertical lines for columns): 0.5 mark

Table follows “tidy data” guidelines: 1 mark