

MA155 Projects

First Name _____

Last Name _____

Project 2: Descriptive Statistics

Due Date: xx/xx/xx @ xx p.m. on Canvas

Instructions:

Use your Project 1 data set that has a sample size of 50 to complete this project.

1. **(x points)** Construct a frequency distribution (round your percentages to the nearest whole number) for “sex” in excel (Watch this video first <https://www.youtube.com/watch?v=IJTNX3eV7mw>).

Use your excel results/output to complete the table below. Compare the percentages for males and females.

Table 1: Percentage Distribution of Sex of Participants

Sex	Frequency	%
Male		
Female		
Total		

2. **(x points)** Construct a bar graph/chart for “sex” in excel (Watch this video first <https://www.youtube.com/watch?v=jSpfkiRad6M>).

Paste your graph from excel here. Make sure to number, title, and label your graph (e.g., Figure 1: Bar Graph/Chart showing Sex of Participants). Provide a brief description of your graph/chart.

3. **(xx points)** Find the mean, median, standard deviation, minimum, maximum, and range of “weight” and “height” by “sex” using the **Data Analysis Tool** in excel. Round all computations to two decimal places (Watch this video to know how to use the Data Analysis Tool in Excel https://www.youtube.com/watch?v=p8dz1znP5_g). To complete this part of the project, you first need to divide “weight” and “height” into two groups of “sex” that is “Males” and “Females” using the **filter function** in excel (Watch this video to know how to filter observations in excel https://youtu.be/04_kOwCnyog).

Use your excel results/output to complete the table below. Compare the means, medians, and standard deviations of weight and height of males and females.

Table 2: Summary Statistics of Weight and Height by Sex of Participants

Measure	Weight		Height	
	Male	Female	Male	Female
Mean				
Median				
Standard Deviation				
Minimum				
Maximum				
Range				

4. **(xx points)** Construct a side-by-side boxplot for “weight” by “sex” in excel. (Watch this video first <https://www.youtube.com/watch?v=BcwFD0lCOfo>).

Paste your plot from excel here. Make sure to number, title, and label your graph (e.g., Figure 2: Boxplot for Weight by Sex of Participants). Provide a brief description of your plot.

5. **(xx points)** Construct a side-by-side boxplot for “height” by “sex” in excel. (Watch this video first <https://www.youtube.com/watch?v=BcwFD0lCOfo>).

Paste your plot from excel here. Make sure to number, title, and label your graph (e.g., Figure 3: Boxplot for Height by Sex of Participants). Provide a brief description of your plot.