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CSC 346 Introduction to Data Science
Project 1
1/24/2022

1. The purpose of this assignment is to analyze the data in two different problems to make a decision. The first problem analyzed how different chicken feeds would affect chicken weights. A chart was made from the data collected that showed the relation of chicken weights and different kinds of feed. The second problem was similar to the first in that we were tasked with making a decision based on the data given. In this case, I would make a decision on which insurance provider to choose based on their ratings. In this instance, I chose who I thought was most consistent in their ratings, not necessarily on who had the highest ratings. This assignment made me analyze data in two scenarios, present it visually, and make informed decisions based on my findings.

2. Methodology: When working on this project I used both google docs and sheets to analyze the data given. I took Dr. Forouraghi's data for the chicken problem off github and put it in my own repository. From there I was able to make calculations and inferences in google sheets. I used the same methodology for the insurance provider question also. Lastly, I summarize my findings in this report.

3. Conclusion: Through my findings in the first problem by analyzing the data given, I concluded that the best type of feed to use was sunflower. This decision was based on the mean average weight that was recorded. In the second problem, I chose Progressive to be the best choice. This was due to their consistent ratings, not that they had the best. I figure that I would rather have solid consistent ratings rather than ones with more of a range.
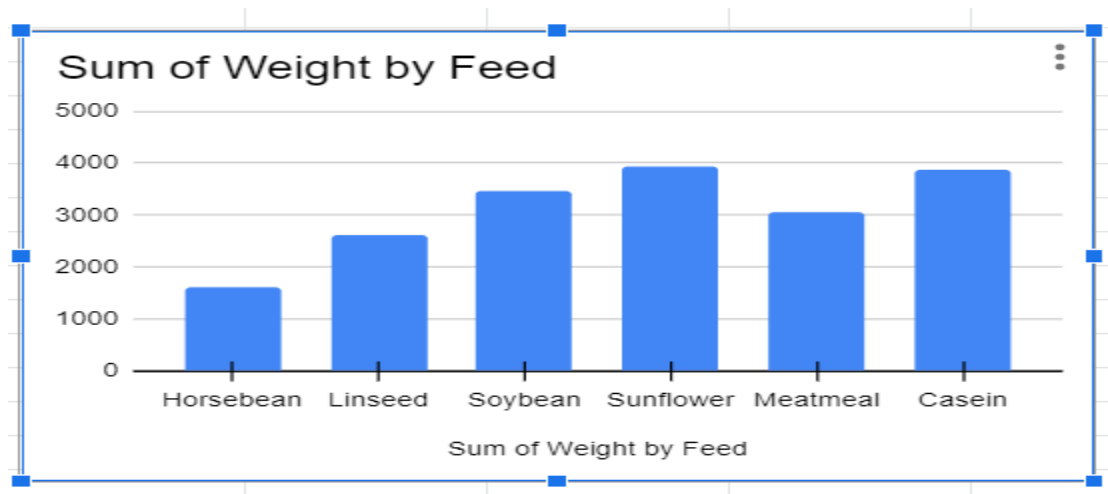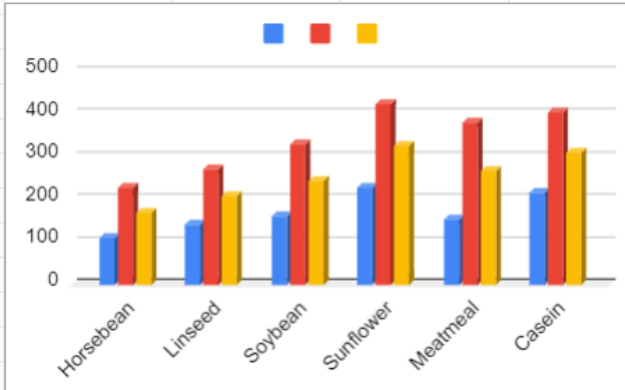
4. References: Canvas Assignment.

Problem 1:

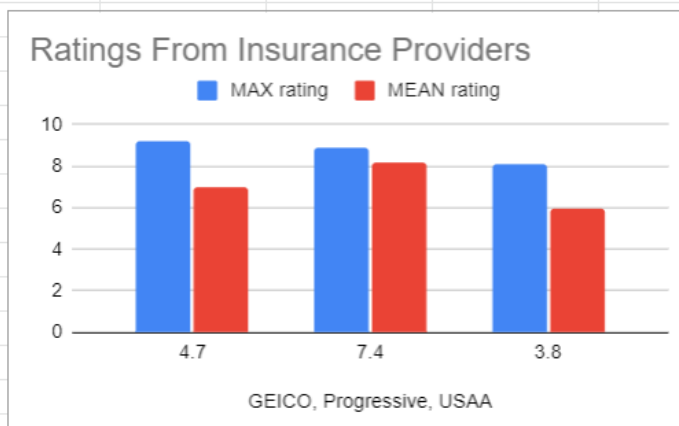| Table: The Relation of Chicken Weights and Food Types			
Food Type	Min Weight (Blue)	Max Weight (Red)	Mean Weight (Yellow)
Horsebean	108	227	167.5
Linseed	141	271	206
Soybean	158	329	243.5
Sunflower	226	423	324.5
Meatmeal	153	380	266.5
Casein	216	404	310

- I think the most beneficial feed that a farmer would want to use to grow large chickens would be sunflower feed. This is based on the calculations I have done on the data given regarding the different chicken feeds in relation to recorded weights. Casein would be a close second to sunflower feed. When a farmer is picking which feed to pick just based on how well it develops chickens, sunflower feed is the best choice.

Problem 2:

Table: Summary of Ratings from Insurance Providers			
Insurance Provider	MIN Rating	MAX rating	MEAN rating
GEICO	4.7	9.2	6.95
Progressive	7.4	8.9	8.15
USAA	3.8	8.1	5.95

Ratings From Insurance Providers

Based on the data given I believe the best insurance provider to use is Progressive. They have a small range between the minimum rating and the maximum rating compared to their

counterparts. It looks like Geico and USAA have both lower ratings mean ratings and larger ranges in their ratings recorded. It seems that Progressive is the obvious choice in choosing from this data set.