## Problem1:

Imagine you see yourself as the next Harland Sanders (founder of KFC) and want to learn about the poultry business at a much earlier age than Mr. Sanders did. You want to figure out what kind of feed can help grow healthier chickens. The dataset can be found here: <a href="https://github.com/bforoura/IDS">https://github.com/bforoura/IDS</a>

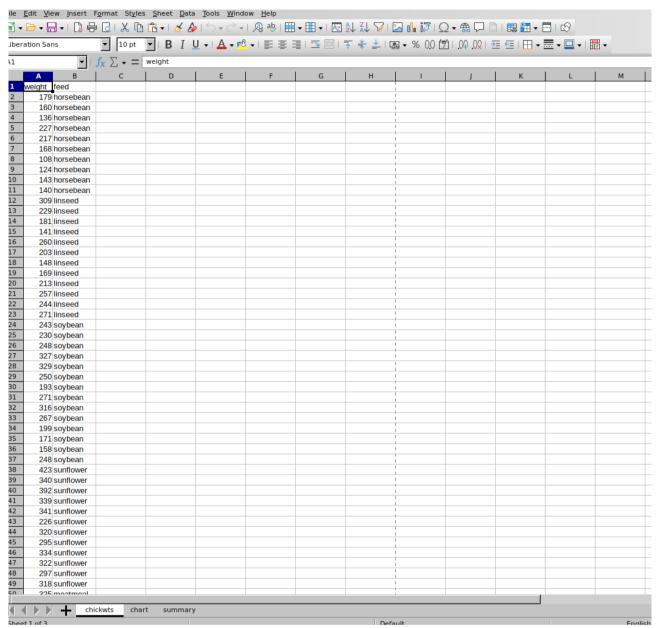


Figure: 1.1 Data

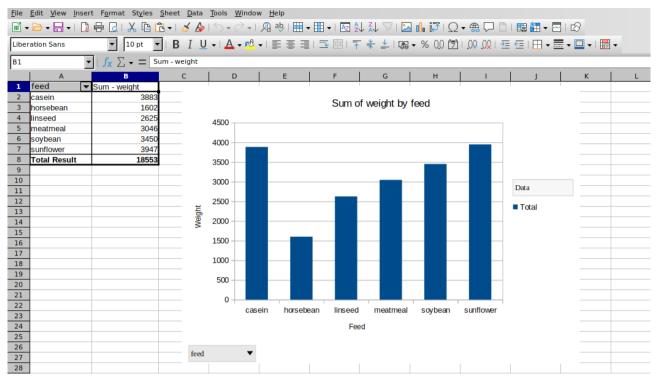


Figure: 1.2 Chart

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F5 $  f_X \rangle =  $										
	A	В	С		D	Е				
	Table:Summary of chicken weights according to the food type									
1	Table:S	ummary of cl	nicken weights acc	ording to the f	ood type					
2	Table:S	ummary of ch	nicken weights acc	ording to the f	ood type					
		Data		cording to the f	ood type					
2		Data	Average - weight		ood type					
2	feed ▼	Data Min - weight	Average - weight 323.583333333333	Max - weight						
2 3 4	feed ▼ casein	Data Min - weight 216	Average - weight 323.583333333333	Max - weight	404					
2 3 4 5	feed ▼ casein horsebean	Data Min - weight 216 108	Average - weight  323.5833333333333  160.2  218.75	Max - weight	404 227					
2 3 4 5	feed ▼ casein horsebean linseed	Data Min - weight 216 108 141	Average - weight  323.5833333333333  160.2  218.75  276.90909090909091	Max - weight	404 227 309					
2 3 4 5 6 7	feed value casein horsebean linseed meatmeal	Data Min - weight  216 108 141 153	Average - weight  323.583333333333  160.2  218.75  276.909090909091  246.428571428571	Max - weight	404 227 309 380					
2 3 4 5 6 7 8	feed value casein horsebean linseed meatmeal soybean	Data Min - weight  216 108 141 153 158	Average - weight  323.583333333333  160.2  218.75  276.909090909091  246.428571428571  328.9166666666667	Max - weight	404 227 309 380 329					

Figure: 1.2 Summary

## **Finding:**

Q1: Based on the chicken feed data, which type of chicken food appears the most beneficial for a thriving poultry business? Explain your answer.

Ans: Sunflower chicken is consisting a higher weight than any other feed. And its average weight is also higher than others, So sunflower will be most beneficial for a thriving poultry business.

Problem 2: The following table contains an imaginary dataset of auto insurance providers and their ratings as provided by the latest three customers.

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B1		$left$   $f_X$	∑ <b>▼</b> ■ Insurance provider				
	Α	В	С	D	E		
1	#	Insurance provider	Rating (out of 10)				
2	1	GEICO	4.7				
3	2	GEICO	8.3				
4	3	GEICO	9.2				
5	4	Progressive	7.4				
6	5	Progressive	6.7				
7	6	Progressive	8.9				
8	7	USAA	3.8				
9	8	USAA	6.3				
10	9	USAA	8.1				
11							

Figure: 2.1 Data

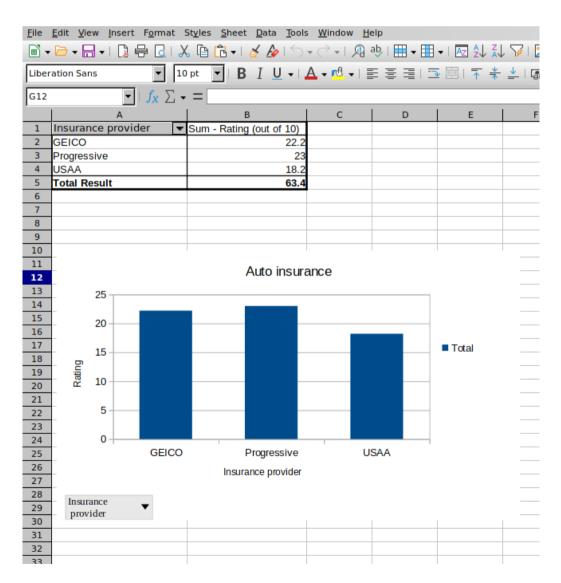


Figure: 2.2 Chart

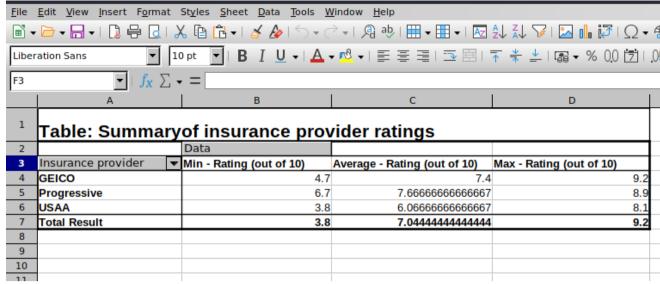


Figure: 2.3 Summary

## Q 2: Determine if you had to choose an auto insurance provider based on these ratings, which one you would opt for. Explain your answer.

**Ans:** I will choose a progressive insurance provider because its overall performance is much better than others. In the given data, it seems that GEICO insurance provider is giving tough competition to progressive insurance and the max rating of GEICO insurance provider is higher than the progressive insurance provider, but GEICO's minimum rating is very low or less than half of the total rating, while the average rating of the progressive insurance provider is greater than GEICO.