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Introduction to data science  
Assignment number #1  
January 26, 2022

Problem 1:

Project goal:

Identifying the data source, collecting the data, analyzing the data set in Excel by calculating their sum of weight, min, max, and mean values using Pivot table.

Collecting data:

- Used the data set of weight of chicken and their food type to calculate the highest growth of chickens with respect to feed.
- Collected the data CSV (comma-separated value) file from GitHub and imported it to excel using Data → Get external data → Import text file.

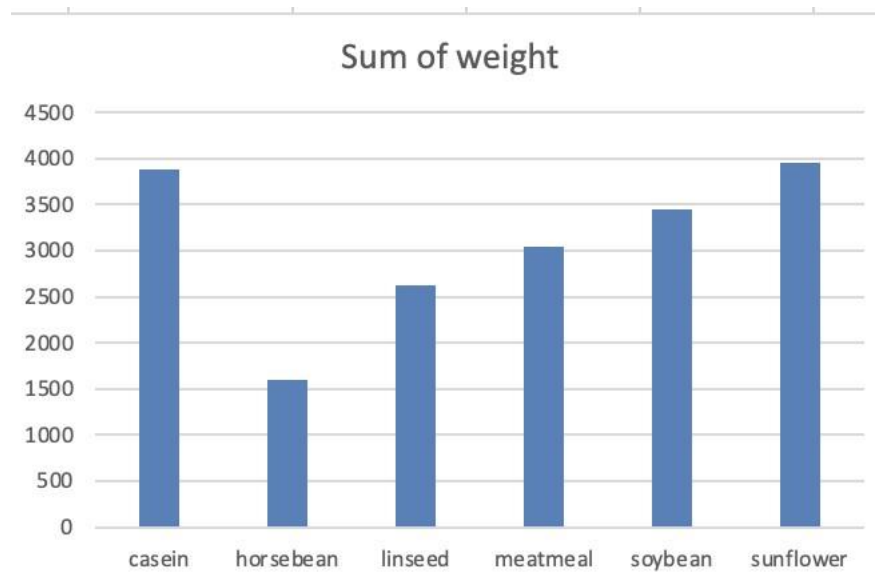
Observations:

- Horsebean has the least minimum weight, maximum weight, and mean weight in comparison to all other food types.
- Sunflower has the highest maximum weight, minimum weight, and mean weight among all the food types.
- Sunflower has the highest sum of weight among all the food types. Feeding sunflower can help you grow healthier chickens.

Table: Summary of chicken weights according to type of foods

Food type ▼	Min weight	Mean weight	Max weight
casein	216	323.6	404
horsebean	108	160.2	227
linseed	141	218.8	309
meatmeal	153	276.9	380
soybean	158	246.4	329
sunflower	226	328.9	423

Graph: Sum of weight by feed



#### Conclusion:

Among all the chicken feed data, sunflower type of food appears the most beneficial for a thriving poultry business because it has the highest sum of weight and mean weight.

## Problem 2:

### Project goal:

Identifying the data source, collecting the data, analyzing the data set in Excel by calculating their sum of weights, min, max, and mean values using Pivot table.

### Collecting data:

- We will use the imaginary data set of auto insurance providers and their ratings as provided by the latest three customers to choose the best auto insurance provider.
- Committed the CSV file in GitHub from my local. Collected the data CSV (comma-separated value) file from GitHub and imported it to excel using Data → Get external data → Import text file.

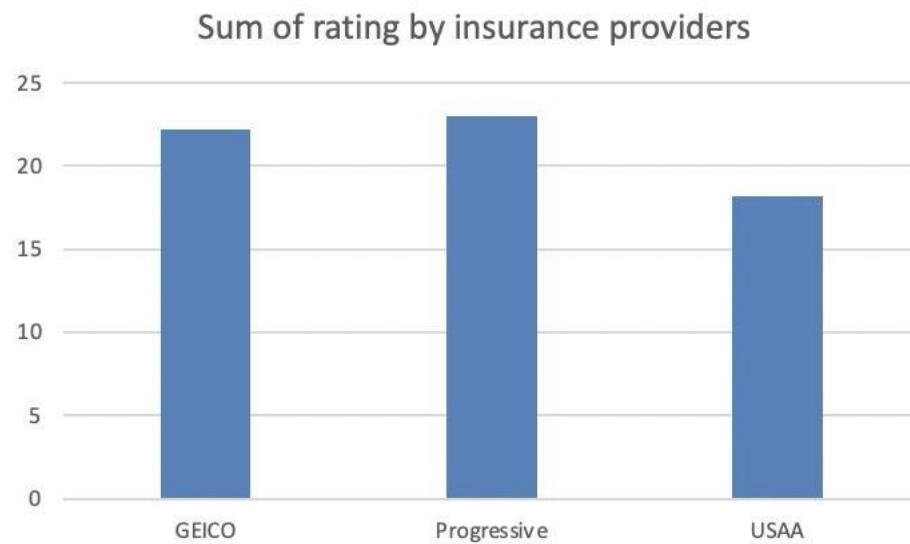
### Observations:

- USAA has the least min of rating, max of rating and mean of rating in comparison to all other providers.
- GEICO has the highest max of rating among all the providers.
- Progressive has the highest min of rating, mean of rating and sum of rating among all the providers.

Table: Summary of insurance providers with rating (out of 10)

Insurance Provider ▼	Min of Rating (out of 10)	Mean of Rating (out of 10)	Max of Rating (out of 10)
GEICO	4.7	7.4	9.2
Progressive	6.7	7.7	8.9
USAA	3.8	6.1	8.1

Graph: Sum of rating by insurance providers



**Conclusion:**

If I had to choose an auto insurance provider based on these ratings, I would opt for Progressive because it has the highest sum of rating and mean of rating.

