Matt Caraher
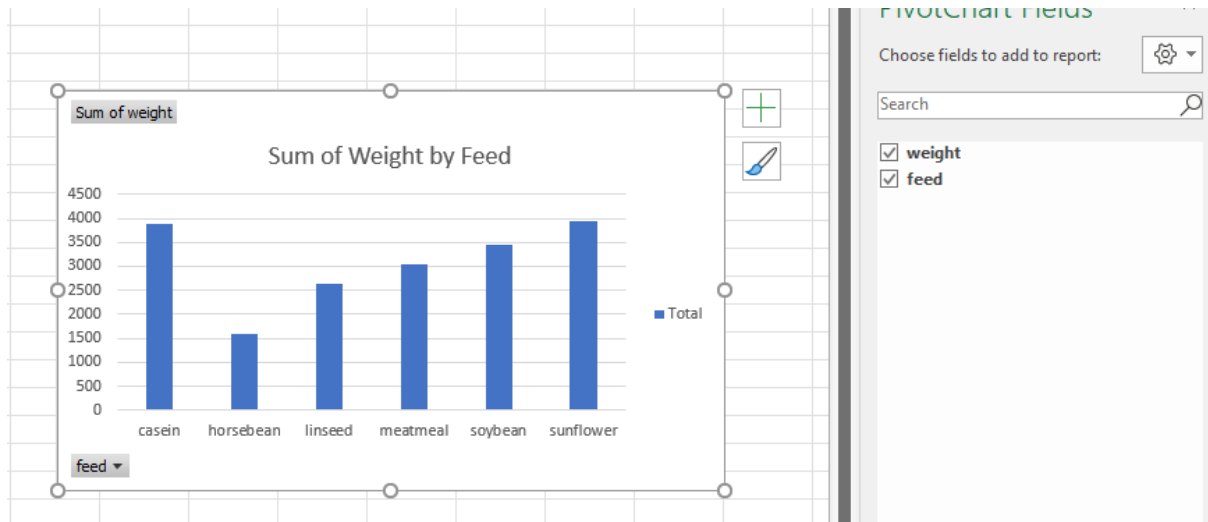
Introduction to Data Science

Project 1

January 25, 2022

Analyzing Data in Excel

**Problem 1:** I made my graph by highlighting the weight and feed columns and then going to pivot chart. After creating a new worksheet for the data, I named it "Sum of Weight by Feed" and checked the weight and feed columns. This is the resulting graph with each of the columns selected:

To take the min, max, and mean values for each group, I made a formula for each cell of the following table. I did this using the excel formula commands such as "MIN" and "MAX". The last row of the table shows the formulas I used for all other rows, except each row had their respective group's cells as the parameters. The values for the last row were 226, 328, 423.

| Food Type | Min weight | Mean weight | Max weight |
|---|---|---|---|
| Casein | 216 | 324 | 404 |
| Horsebean | 108 | 160 | 227 |
| Linseed | 141 | 219 | 309 |
| Meatmeal | 153 | 277 | 380 |
| Soybean | 158 | 246 | 329 |
| Sunflower | =MIN(B38:B49) | =AVERAGE(B38:B49) | =MAX(B38:B49) |

Based on the chicken feed data, I concluded that Sunflower would be the best feed for a thriving poultry business. This is because of the average weight of 328 being the greatest in the table, as well as the min and max being the greatest. It would be best for the poultry business to get as much weight per chicken as possible.

**Problem 2:** I made the table for insurance providers in the same way that I made the previous one, by using a pivot chart. I also changed the output and added average instead of sum in the chart, since that seemed more applicable to ratings.





.
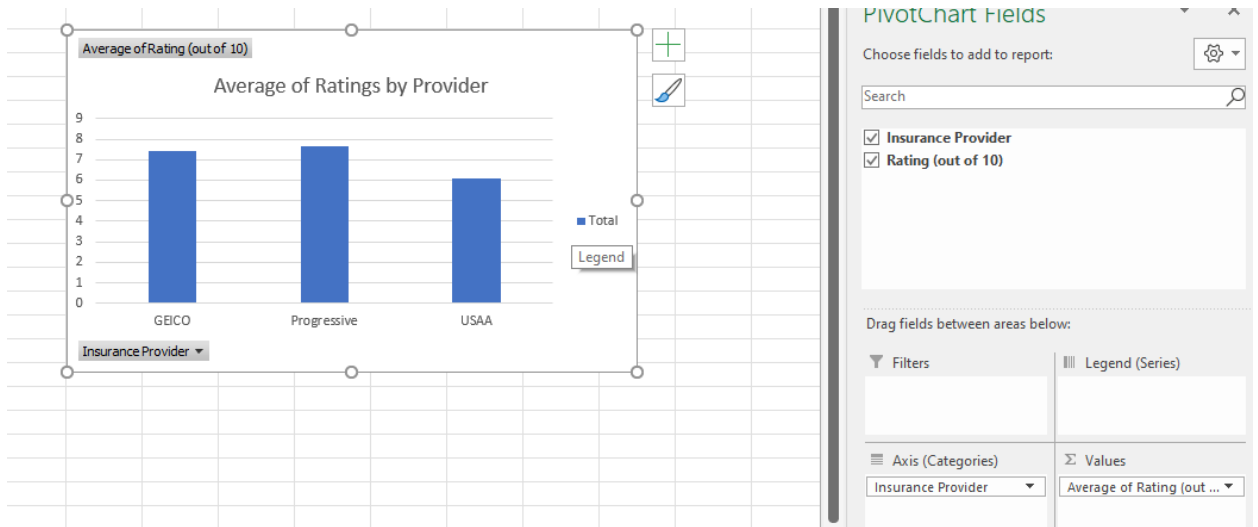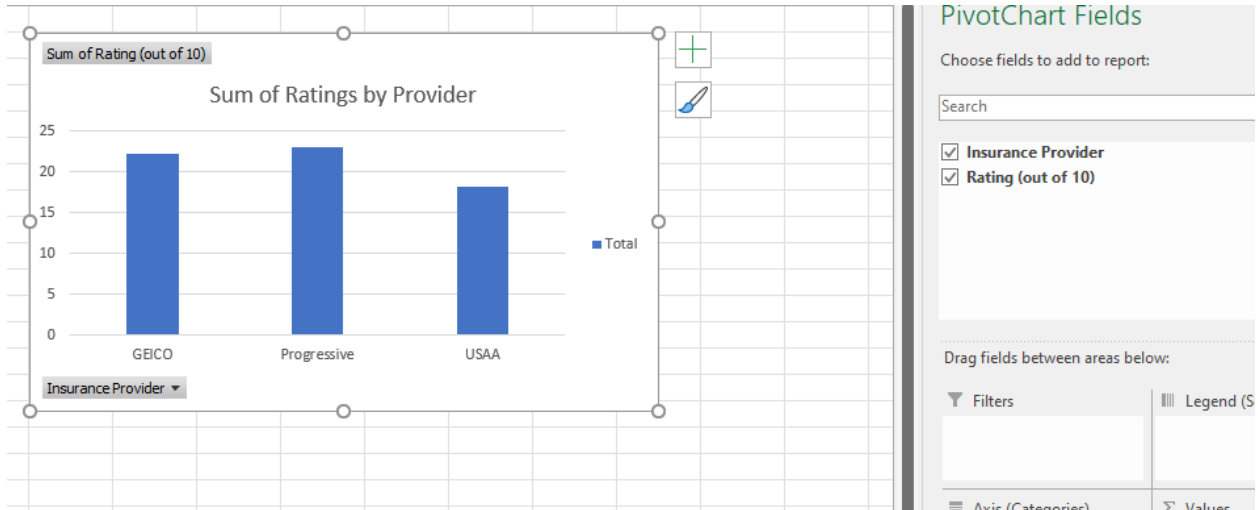
The table was made in the same way by using the formulas =MIN(), =AVERAGE(), and =MAX(). Based on this information, I would choose Progressive as an insurance provider because they have the highest average rating out of the choices.

=MIN(C2:C4)

| | D | E | F | G | H | I | J | K | L | N |
|---|---|---|---|---|---|---|---|---|---|---|
| out of 10) | | | | | | | | | | |
| .7 | | | | | | | | | | |
| .3 | | | | | | | | | | |
| .2 | | | | | | | | | | |
| .4 | | | | | | | | | | |
| .7 | | | | | | | | | | |
| .9 | | | | | | Insurance Provider | Min rating | Mean rating | Max rating | |
| .8 | | | | | | GEICO | 4.7 | 7.4 | 9.2 | |
| .3 | | | | | | Progressive | 6.7 | 7.7 | 8.9 | |
| .1 | | | | | | USAA | 3.8 | 6.1 | 8.1 | |