Excel Lab

Task Checklist

Getting Started = (mostly) Done Tuesday

- ☐ **1.** I can load the newBooks.csv
- ☐ **2.** With the CSV I can
  - ☐ a. Convert it to an Excel Workbook File (the xlsx file extension)
  - ☐ b. I can convert the range of data to a table with no columns (and back)
  - ☐ c. I changed the names of the columns from default to actual meaningful items
- ☐ **3.** I understand “auto-save” vs. “save” vs. save as… commands

Full Descriptive Analytic Tasks – Accurately Describe Data

- ☐ **1.** I understand what a cell is and what a range is
- ☐ **2.** I understand what a “cell reference” means and where to find the cell’s reference number
- ☐ **3.** I understand how to undo mistakes (at least most of them)
- ☐ **4.** With a Table I can
  - ☐ a. Resize columns or rows
  - ☐ b. Insert and Delete Columns and Rows
  - ☐ c. Hide columns that are not needed (& unhide them if needed)
  - ☐ d. Type and Insert new data
- ☐ **5.** Understand a Cell Type and how to change it (including Dollars, Numbers, and Dates)
- ☐ **6.** Add raw text for presentation/explanation’s sake and make it readable with merge or word wrap

Diagnostic Analytic Tasks – trends, correlations, testing

- ☐ **1.** I can create items using auto-suggest (an AI tool Excel offers)
- ☐ **2.** I can propose a Hypothesis about this data
  - ☐ a. Relating to a certain type of book (what it was made into)
  - ☐ b. Relating to certain recent political actions (well, over summer & last spring)

Diagnostic analytics involves items like:

- Testing a Hypothesis
  - Such as stipulating that "The decline in luxury, entertainment, sales are due to the increases in rents." Then checking to data to see if that holds true.
  - The above didn't, we were missing 2 other variables "*…increases in rents, cost of food, cost of gas*". Led to a company closing its office building, moving to remote work so they didn't have to raise people's pay and they were still happy.
- Correlation
  - Correlation means you always see one thing increase (positively) or decrease (negatively) at the same time as another field.
  - **Correlation does not mean causation**, but it does imply a connection to research.
  - Famous (though fake) example: Grocery stores noticed that customer's who bought diapers also bought beer/wine at higher rates. What do you think they did because of that?
- Regression Analysis
  - Trends that are easy to make into line charts. The most common being Time Regression.
  - So sales increase (exponentially) in the 4th quarter is very obvious in most companies.
- Make a Hypothesis: What other trends do you think exist by season or event or etc.?