

Response Summary:

1. Student Information *

First Name	Liam
Last Name	McGuire
Major	Web Programming and Design
Course (e.g. CGT 270-001)	CGT 270
Term (e.g. F2019)	SP2022

2. Email Address *

(University Email Address is required.)

mcguir53@purdue.edu

3. Visualization Assignment *

- Lab Assignment

Analyze

4. Basic Descriptors: for each data component from the Parse Worksheet, identify basic descriptors (basic statistics). Explain *

Year, the times the shadows and temperature appear and their numbers during that time, Punxsutawney Phil, the instances where either full shadows, partial shadows, or no shadows appear, and Average February temperature(Northeast, Midwest, Pennsylvania), the temperature recorded in certain regions during these years.

5. Categorize: consider what is similar and what is different? Categorize the data. Are the variables categorical (normal, ordinal, or rank). Are they quantitative (discrete or continuous)? Show categories. Explain. *

It is a mix of nominal and ordinal data, though if we are talking consistency wise, there are 9 pieces of ordinal data and 1 piece of nominal data. They are mostly quantitative, as they are continuous as they are measured over the amount of time via the data provided in certain years, so this technically goes on forever unless you're trying to find data for certain years.

6. Temporal: is the data streaming data? How is it stored (all at one time, over several years in years, days, minutes, seconds)? Explain. *

It isn't actively streaming the data in a live feed as Groundhog Day only happens once a year. Is stored via 130 years of data and results.

7. Range and Distribution: what is the distribution of the data? Few values, small size, evenly spread, sparse or dense? Explain. *

Evenly spread values, pretty large and mostly dense due to three different variables and categories being listed, with the other 6-7 just being variations of the same variable.

Evaluate

8. Questions and Assumptions: list at least 3 questions you plan to answer with the data or list the questions if they were provided. Must be complete sentences and end in a question mark. What assumptions are you making? *

Question 1	How often do full shadows appear in the last 130 years of groundhog day?
Question 2	In the last 130 years, what is the most consistent temperature value in the Northeast?
Question 3	Out of February and March, which of the months has the highest average temperature.
Assumptions	Partial shadows are extremely rare.
