

## Response Summary:

### 1. Student Information \*

<b>First Name</b>	Keegan
<b>Last Name</b>	Palonis
<b>Major</b>	Data Visualization
<b>Course</b> (e.g. CGT 270-001)	CGT 270-003
<b>Term</b> (e.g. F2019)	S2022

### 2. Email Address \*

(University Email Address is required.)

kpalonis@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 \*

Basic descriptors of the float data is temperature, and what the shadow looked like for Punxsutawney Phil.

#### 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. \*

Categories could include February and March temperatures by region (normal, continuous). Then the shadow (normal, discrete).

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

The data is stored over years, as groundhog day is a once a year occurrence, and monthly in order to gather the average temperatures per month.

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

Distribution of the data is dense, as the temperatures have a range of 20-25 for 120 years of data collection.

## 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? \***

<b>Question 1</b>	Has the average temperatures in February and March changed from 1895 to 2016?
<b>Question 2</b>	Does Punxsutawney Phil seeing his shadow on Groundhog day (indicating 6 more weeks of winter) lead to colder average temperatures in February and March?
<b>Question 3</b>	How different is the average temperature in Pennsylvania from the Midwest and Northeast in February and March?
<b>Assumptions</b>	Temperature in Fahrenheit

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