**Project Overview**

**Objective:**The goal of this project is to analyze temperature data from NOAA, specifically focusing on Ann Arbor, Michigan. The analysis aims to visualize temperature trends, identify record temperatures, and present findings effectively.

**Key Steps Taken**

1. **Familiarization with Datasets:**
   * The project began with exploring two datasets: temperature.csv (which contains temperature records) and BinSize.csv (which contains information about weather stations, including their locations).
2. **Data Cleaning and Preparation:**
   * Leap days were removed to maintain consistency in the time series analysis.
   * The datasets were merged appropriately based on station IDs to enable a focused analysis on Ann Arbor.
3. **Visualizations:**
   * **Temperature Trends:** Created line graphs showing record high and low temperatures from 2005 to 2014, along with shaded areas representing the range between these two extremes.
   * **Record Temperature Breaks:** Overlaid scatter plots to highlight 2015 temperature data points that broke previous records.
4. **Station Mapping:**
   * Visualized the locations of weather stations near Ann Arbor on a map to provide geographical context to the temperature data.
5. **Temperature Summary Plot for 2015:**
   * Generated a summary plot to display average, maximum, and minimum temperatures for Ann Arbor in 2015.