Rain Data Project

Summary  
For this project you will read in and analyze actual rain data from NOAA for the Seattle Area and compute average daily rain total on monthly basis.

Although the code for this project should not be very long, many will find this to be a very challenging project, so you **should start on the project now** to have adequate time to finish before the due date.

## Goals

Demonstrate the ability to write code that reads from a text file, store the data in a 2-dimensional list, and use complex compressions to process the data. In addition, demonstrate the use of exceptions.

## Notes

As we are nearing the end of the quarter, you will **not have the opportunity to resubmit your project to get a better score.** Make sure you carefully read this project description and the rubric at the beginning and grade yourself before you submit.

## Description

Your program must do the following tasks:

1. Ask the user for the path to the data file.
2. Open and read the data file the user provided.
3. If any errors occur opening or reading from the data file, the exception must be caught and the user must be told that an error occurred. **The raw exception text must not be visible to the end user.**
4. The data file is in the following format:
   1. <Month>,<daily rainfall amount in inches>
      1. Note the day of the month is not in the data file
   2. The month is represented by the standard 3-character abbreviation.
5. The data must be read into a 2-dimensional list, each inner element consists of the Month and the rainfall total. Here is a list representing the first 4 days of the data (your program **must** store the data in this format):  
     
   [['Nov', 0.0], ['Nov', 0.0], ['Nov', 0.09], ['Nov', 0.18]]
6. After the data is read and stored in a 2-dimensional list, use compression to separate the data into separate lists, one list for each month.
7. For each month’s list, use compression again to compute the average rainfall for each month
8. Finally display the average daily rainfall on a bar chart similar to this:  
     
   Chart, bar chart

   Description automatically generated