CM50266- Applied Data Science

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Lab 1 – Task 2

For the monthly trends in the weather data, I have used a vertical timeline chart to be able to depict 12 interesting insights which illustrate the weather variations in Bath. The data considered for this chart was from 9th October 2016 to 30th September 2017. For each month the monthly mean and standard deviation have been computed for each variable. Additionally, the difference in the mean from previous months was also calculated to extract the increase/decrease for each variable. After observing the beforementioned statistics, I mentioned the maximum and minimum for each variable covering the 12-month period.

For the seasonal trends in the weather data, as the number of data points have been reduced considerably from the initial 355 observations to 4 seasonal observations for each variable. The data was split in the following manner: 9th October 2016 – 30th November 2016 (Autumn), 1st December 2016 – 28th February 2017 (Winter), 1st March 2017 – 31st May 2017 (Spring), 1st June 2017 – 31st August 2017. The infographic contains a tabular representation of the mean, standard deviation of each of the variables, paired with a simple pictorial association to the season. This method of depicting the information as there are only 4 seasonal observational values of the variables.