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Weather forecast in Australia

Relevant training course: Data Scientist

Level of difficulty: 06/10

Description of the project:

This dataset contains approximately 10 years of daily weather observations from many locations in Australia.
So there are different interesting visualizations possible.
The first objective would be to predict the target variable: RainTomorrow. It means: did it rain the next day, yes or no? This column is Yes if the rain for that day was 1mm or more.
The same goes for wind or temperature predictions.
In a second step, we can make long-term predictions, using mathematical techniques for the analysis of time series, and/or recurrent neural networks.

Resources to consult:
- **Data:**
    - https://www.kaggle.com/jsphyg/weather-dataset-rattle-package

- **Bibliography:**
    - Observations come from many weather stations. Daily observations are available at: http://www.bom.gov.au/climate/data.
    - An example of the latest weather observations in Canberra: http://www.bom.gov.au/climate/dwo/IDCJDW2801.latest.shtml
    - Definitions adapted from http://www.bom.gov.au/climate/dwo/IDCJDW0000.shtml
    - Data source: http://www.bom.gov.au/climate/dwo/ and http://www.bom.gov.au/climate/data.

Validation conditions for the project:
- an exploration, data visualization and data pre-processing **report** ;
- a modeling **report** ;
- a final **report** and associated **GitHub**.