Your model would play a crucial role in identifying the regions that need to be prepared against potential drainage problems, saving crops, flight schedules, and more. Your assignment for the Meteorological Department is as follows:

* Perform initial data exploration to learn about the shape, size, and type of the data at hand.
* Learn about each feature that contributes to rain prediction. Then clean and remove the erroneous column.
* Identify the target variable, and apply univariate analysis to figure out the nature of the problem and the frequency distribution of the values.
* Figure out the categorical and numerical attributes, and analyze each one of them to deal with missing values, outliers, and date time values.
* Check out the importance of each variable from the correlation matrix and the corresponding heatmap.
* Engineer the features to prepare the data for the model. Impute missing values in numerical and categorical columns, engineer outliers, and one-hot encode categorical features.
* Select and train the model to predict whether it is going to rain tomorrow or not.