Ronald Canales

COSC 3337 Data Science I

Subtask 1

1. In the correlation matrix, the greatest positive correlation is between rain and humidity with about 0.4. This indicates that if humidity is high then it is more likely to receive a higher amount of rain since there is a positive correlation. It may be a low correlation since humidity is measured in percent and rain in inches. Maximum temp and visibility also have a positive correlation. The lowest negative correlation is between humidity and visibility with about -0.624 which may indicate that when there is more humidity, more clouds may form causing lower visibility. Another negative correlation is between rain and visibility with -0.45 which indicates that more rain means less visibility. Weak correlations mostly appear with maximum temperature, the weakest being with humidity and rain.

For covariance, there is a pronounced positive relation with the maximum temperatures and visibility. This can be due to the large range that visibility is measured. Another positive covariance is between rain and humidity which implies that they both move in the same direction if either one changes. The lowest is between humidity and visibility with -8136.6 which indicates that they have no direct relationship or they move in opposite directions.