Malbora Hajdarmataj

GITHUB: Malbora88

GITHUB LINK: https://github.com/Malbora88/Mat327

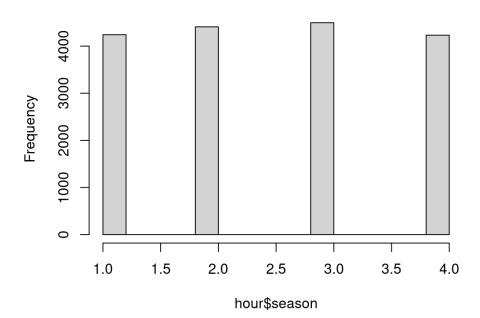
R link https://rstudiow.lehman.edu/s/dbb74cfc78a314e80e478/

MILESTONE 3

Column 1

Data hour.csv

Histogram of hour\$season

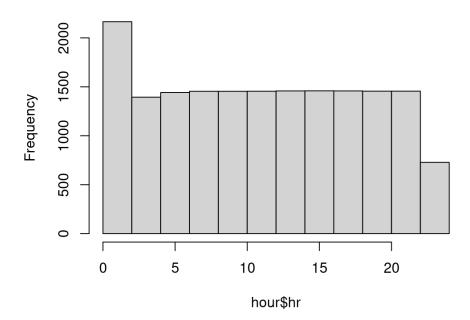


The histogram displayed here illustrates how our datasets observations are distributed across the 24 hours of the day. Each bar represents the number of records found within an hour.

Uniform distribution; all bars are approximately the height; this tells us that the observations are evenly distributed throughout the day. This means that all clocks have an occurrence in the dataset. This histogram helps identify which clocks have the least occurrences in our dataset by providing insight into time-related patterns and trends. It enables us to make decisions and perform data-based analysis.

For example, Winter; The duration of the strip, for winter, is not short, it may indicate a drawing of observations. Cold weather and the possibility of snow may encourage people to participate in activities such as cycling or outdoor activities in the snow. Based on the information provided, we can observe seasonal patterns in the dataset. There appears to be an increase in sightings during the summer months followed by a decrease during the winter. This implies that seasonal changes have an impact on the data. Visualizing this type of trend provides insights for data-driven decision making in businesses or studies that are affected by variations.

Histogram of hour\$hr



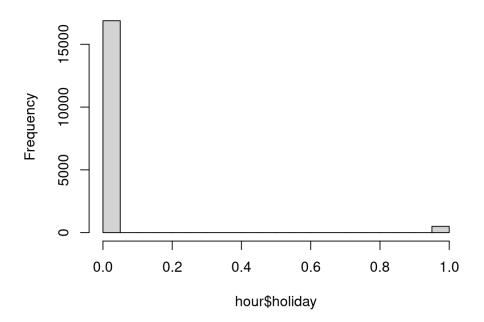
The histogram displaying the "Hours" column provides a vivid representation of hourly activity patterns

Distinct Patterns: The distribution is not random. There are clear periods of high and low activity, suggesting that some hours have defining characteristics that influence recorded events. Distribution Shape: Multiple peaks and valleys indicate multiple modes or periods of peak activity. Specifically, the morning and evening rushes are easily identifiable.

Range: It appears from the histogram that there is a balance with peaks both in the morning and in the evening, except for 00:00.

Consistency throughout the day: Relatively consistent frequency from mid-morning to late afternoon implies a consistent level of activity during these hours. As we analyze this histogram, we consider how the time of day affects the observed metric.

Histogram of hour\$holiday



The histogram provided provides a side-by-side comparison of activities and observations that occur during weekdays and holidays.

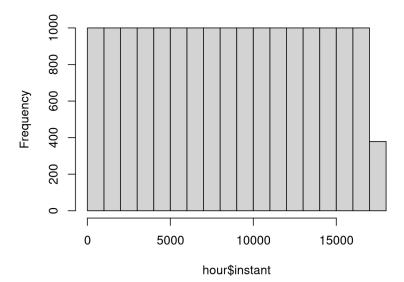
The first obvious aspect is the difference between the two distributions. While weekdays may exhibit a peak pattern (perhaps representing peak hours), holidays may exhibit a single broad peak indicating slack engagement.

Shape and Skewness; Days of the week tend to show a bimodal shape suggesting two periods of activity. On the other hand, breaks appear to have a uniform distribution or slightly skewed toward later hours, implying that activities start later and are spread throughout the day.

Any significant deviations from the frequencies during the hours can be intriguing. For example, in our case there is a root of activity during holiday nights, it can be suggested celebrations during holidays and late hours.

Consistency during the days of the week; The pattern for weekdays tends to be more consistent due to the nature of weekdays. In contrast, low-regime vacations can show variability in their patterns. By studying this histogram, we can understand how behaviors and activities change during vacations compared to days. This knowledge is extremely useful for businesses and people, city planners or any organization that needs to plan according to activity patterns.

Histogram of hour\$instant



The histogram showing the "column" provides insight into how often observations were recorded at different times.

By examining the shape of the histogram, we can determine that the observations are evenly distributed across all hours. In this case we see a uniform histogram except for the last column. We must pay attention to any bar in the histogram that differs from the model. These outliers are attributed to events, anomalies, or data entry errors. The histogram does not tilt to any side and the bars do not have a great height, which shows that the data is based on a few people.