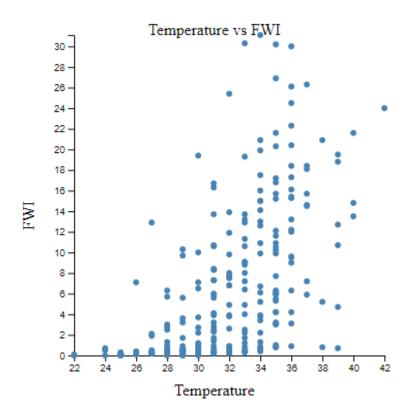
Name: Chirag Mehta UID: 2021600044 Branch: CSE(AIML)

Subject: Advanced Data Visualizations

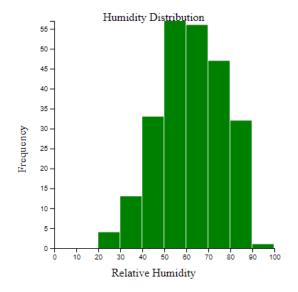


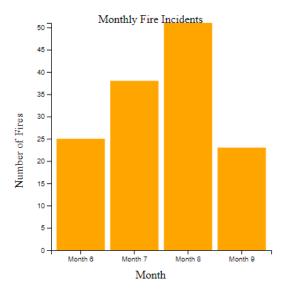
1. Positive Correlation Between Temperature and FWI:

The graph indicates a general trend where the Fire Weather Index (FWI) increases as the temperature rises, suggesting a positive relationship. Higher temperatures might lead to conditions favorable for fires.

2. Clustering at Specific Temperature Ranges:

There is a noticeable concentration of data points around temperatures between **28°C and 35°C**. This could indicate that most observations fall within this range, possibly reflecting the common climatic conditions in the region during the study period.



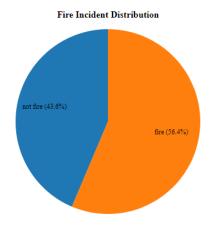


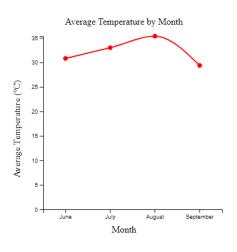
Humidity Distribution:

- 1. **Peak Humidity:** The highest frequency of relative humidity occurs between 60% and 70%. This suggests that these humidity levels are most commonly observed during the measurement period.
- 2. **Low Humidity:** There is a notable decrease in frequency for relative humidity below 20%. This indicates that very low humidity levels are less common.

Monthly Fire Incidents:

- 1. **Peak Fire Season:** The highest number of fire incidents occurs in Month 8. This suggests that August is the peak month for fires in the region.
- 2. **Decreasing Trend:** There is a general decreasing trend in fire incidents from Month 8 to Month 9. This indicates that fire activity declines towards the end of the observed period.





- 4. Fire Incident Distribution (Pie Chart):
- a. This chart likely shows the distribution between two categories (fire vs. no fire).
- b. One category (in orange) represents a larger proportion, which could indicate a predominance of fire incidents in the dataset.
- 5. Average Temperature by Month Line Chart:
- a. The average temperature gradually rises from June to August, peaking in August.
- b. In September, the temperature decreases, showing a seasonal trend where higher temperatures correlate with peak fire months