

Task- 4.2

Railway Data Report Summary

1. Weekly Distribution of Trains

- Most trains operate on weekdays, with peak counts on **Friday** and **Monday**.
- **Sunday** consistently has the lowest number of trains.

2. Top Operational Stations

- **Delhi**, **Mumbai**, and **Howrah** appear as major hubs, frequently as both source and destination stations.

3. Operational Categories

- Trains have been categorized as **Weekday**, **Weekend**, or **Both** based on their schedule.
- The majority of services run on weekdays, while weekend-only services are fewer.

4. Trends and Recommendations

- Weekend service coverage is significantly lower, which may affect leisure or regional travel.
- Some routes are highly saturated—optimizing scheduling could reduce congestion.

5. Visual Insights

- Heatmaps and bar charts help identify hotspots in the railway network.
- Source stations like **Delhi** show consistent daily service, validating their hub status.