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GitHub Link: <https://github.com/ArpanC03/GuviProject1DataScience>

AQI Data

City	State	AQI
Delhi	Delhi	252
Mumbai	Maharashtra	191
Bengaluru	Karnataka	132
Kolkata	West Bengal	146
Chennai	Tamil Nadu	125
Hyderabad	Telangana	153
Anmedabad	Gujarat	129

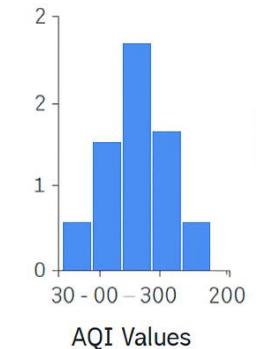
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Dashboard

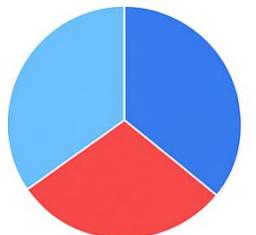
AQI Scatter Map



AQI Histogram



AQI Distribution



DATA SCIENCE INTERN

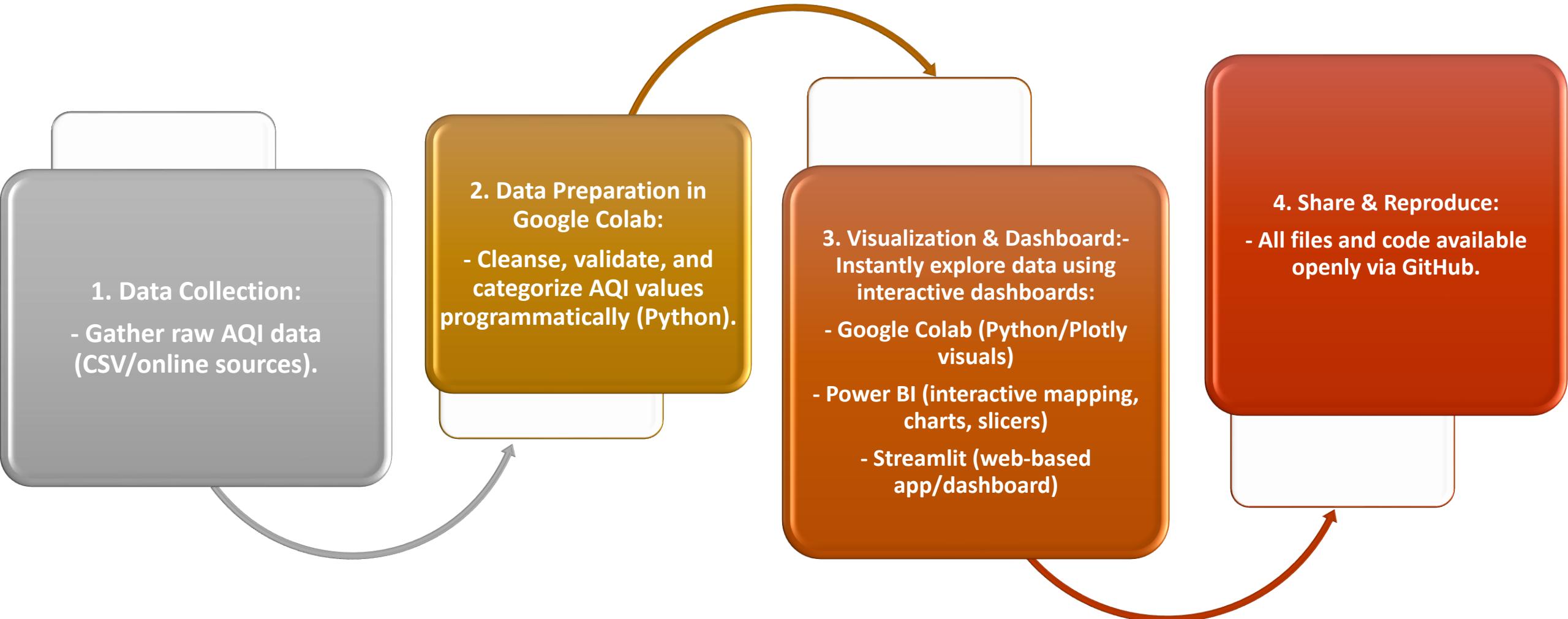
Problem Statement 5:

- **AQI Mapping of Indian Cities**
- **Mapping of AQI readings using geospatial visualizations.**
- **Choropleth map by AQI**
- **Tooltip: City name + AQI**
- **AQI filter: Good, Moderate, Poor**

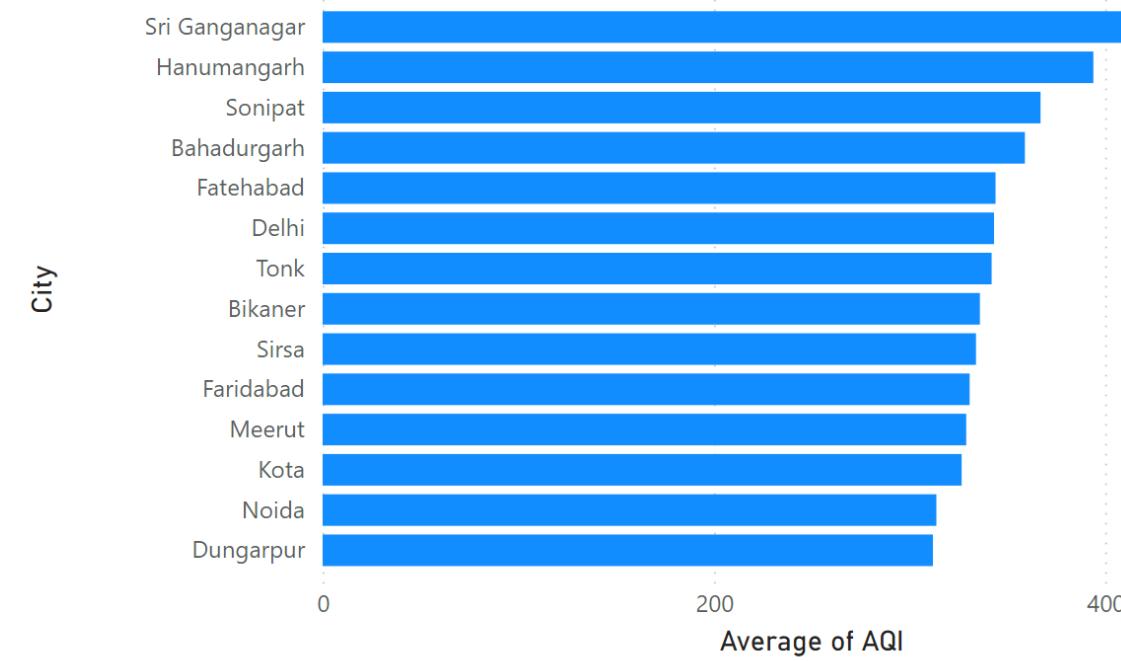
Air pollution in Indian cities is a major environmental and health concern, but city-level AQI data is complex, scattered, and difficult for citizens or policymakers to interpret quickly.

Our goal: Build an interactive dashboard that streamlines exploration, visualization, and analysis of real AQI data for all major Indian cities, to empower evidence-driven action and awareness.

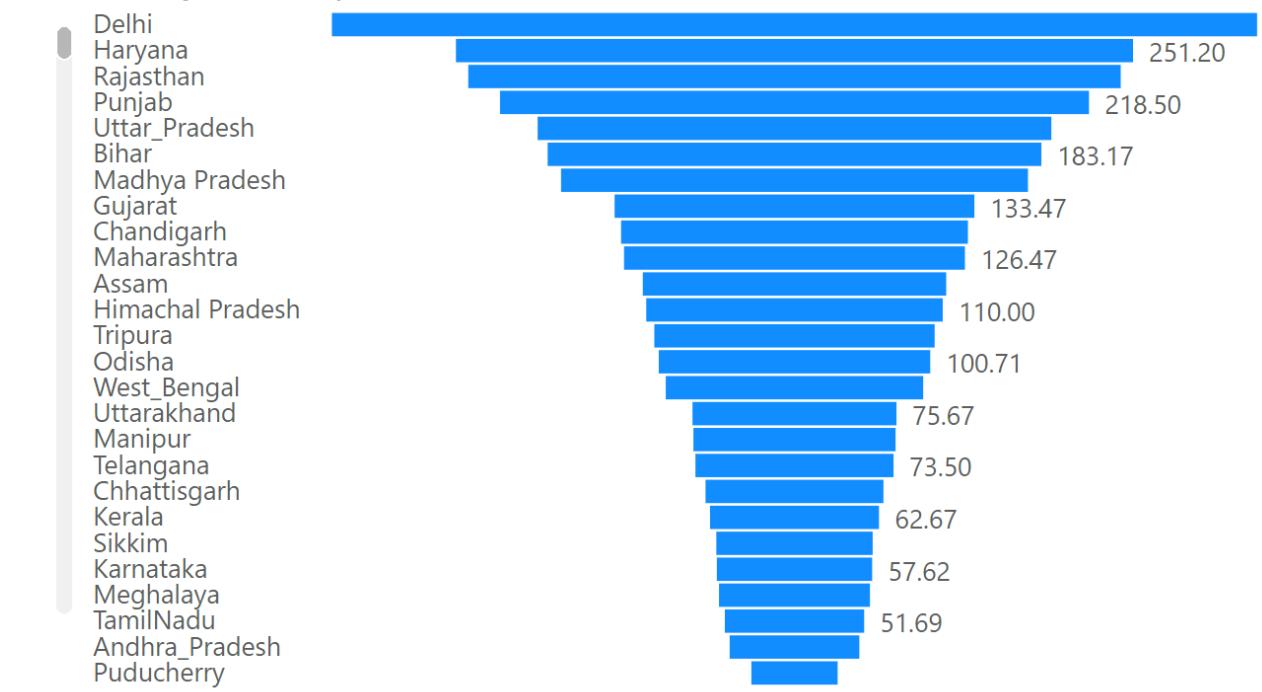
DATA PIPELINE AND WORKFLOW



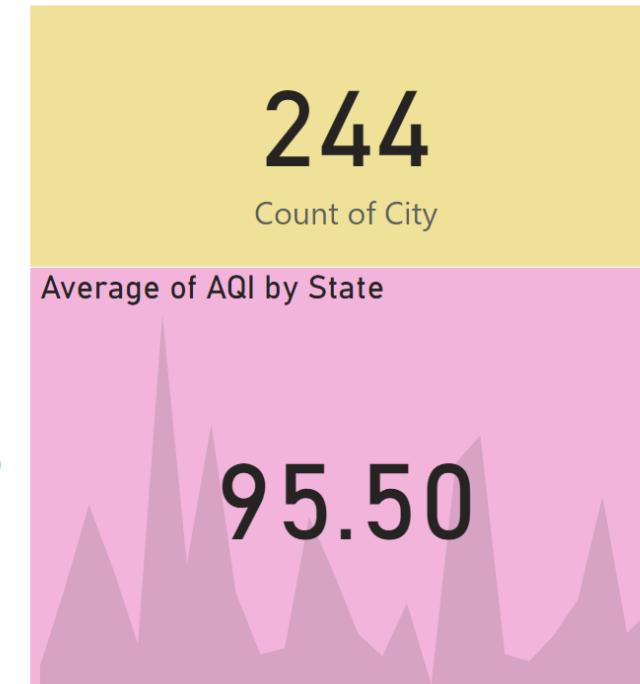
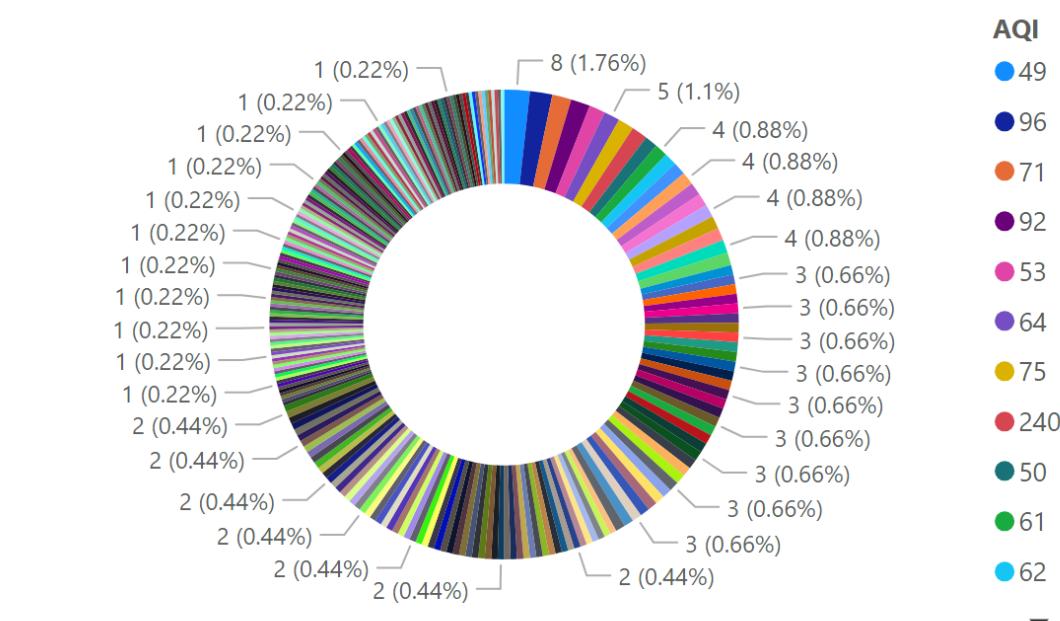
Average of AQI by City



Average of AQI by State

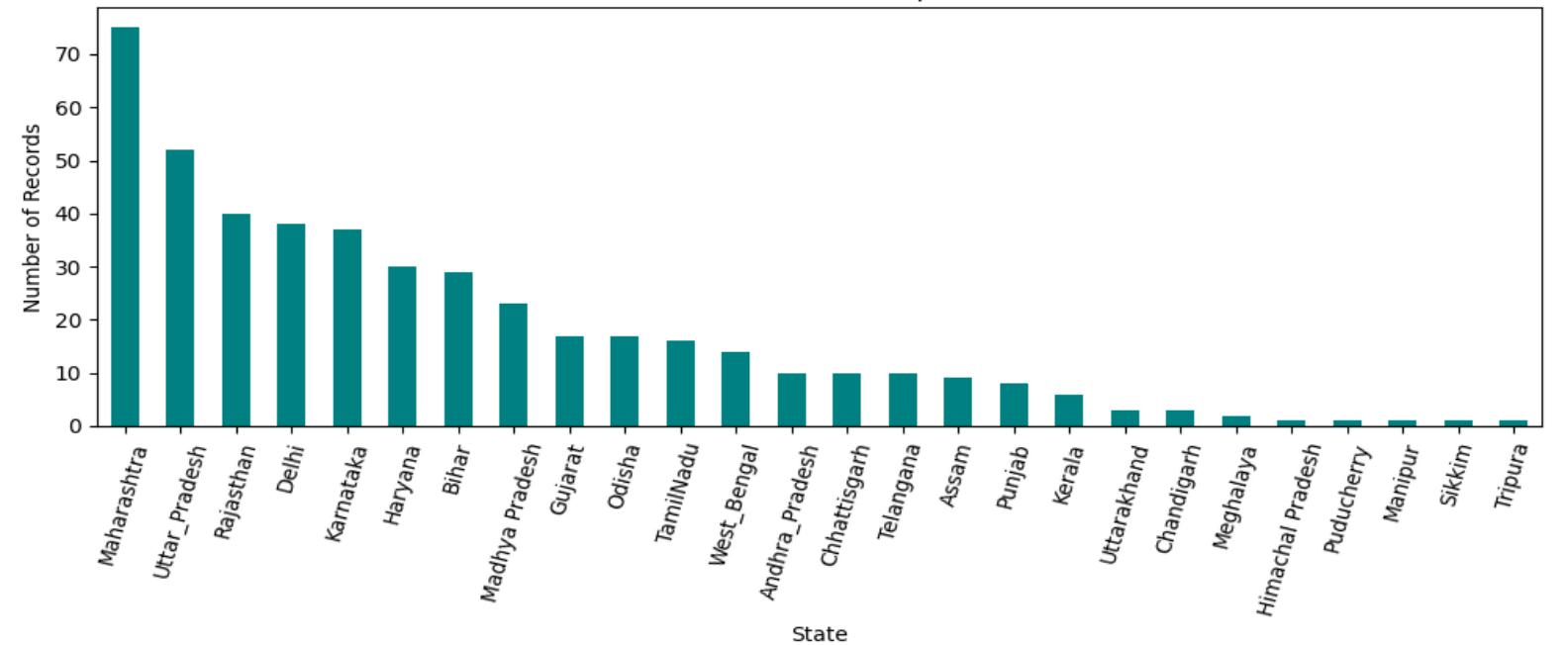


Count of City by AQI

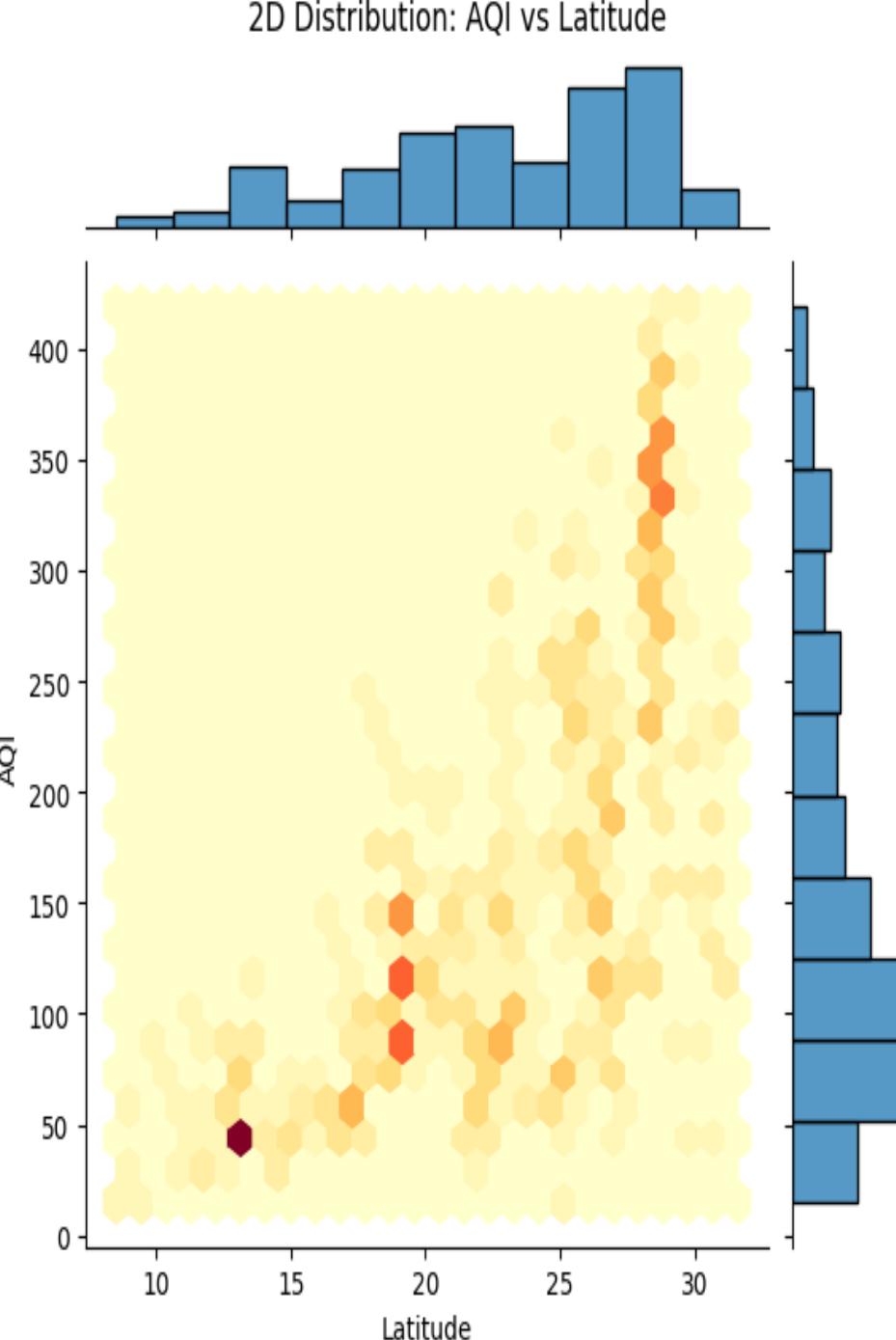


City	State	Average of AQI	Sum of AQI
Agartala	Tripura	104.00	104
Agra	Uttar_Pradesh	93.00	558
Ahmedabad	Gujarat	126.44	1138
Ahmednagar	Maharashtra	110.00	110
Ajmer	Rajasthan	151.00	151
Akola	Maharashtra	113.00	113
Alwar	Rajasthan	114.00	114
Ambala	Haryana	163.00	163
Amravati	Maharashtra	119.50	239
Amritsar	Punjab	261.00	261
Anantapur	Andhra_Prades	29.00	29
Total		161.56	73346

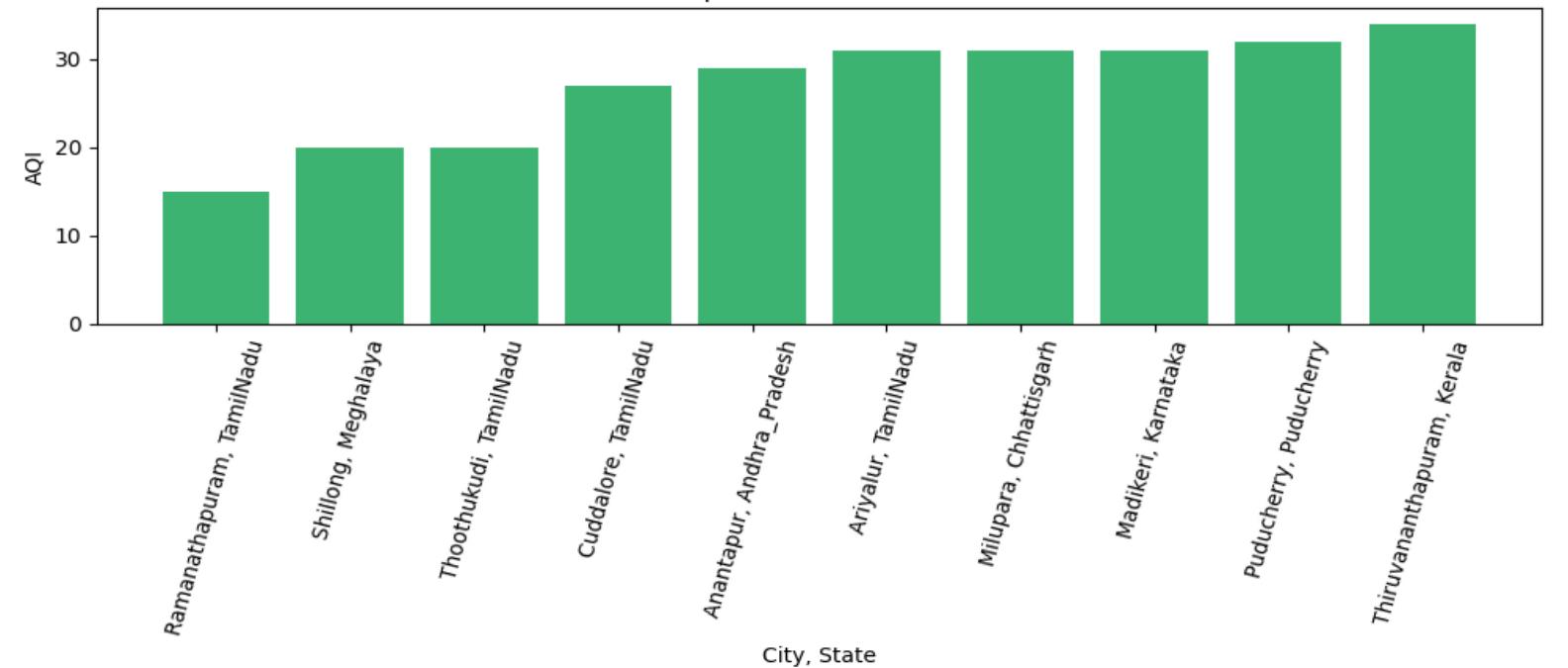
Number of AQI Stations per State

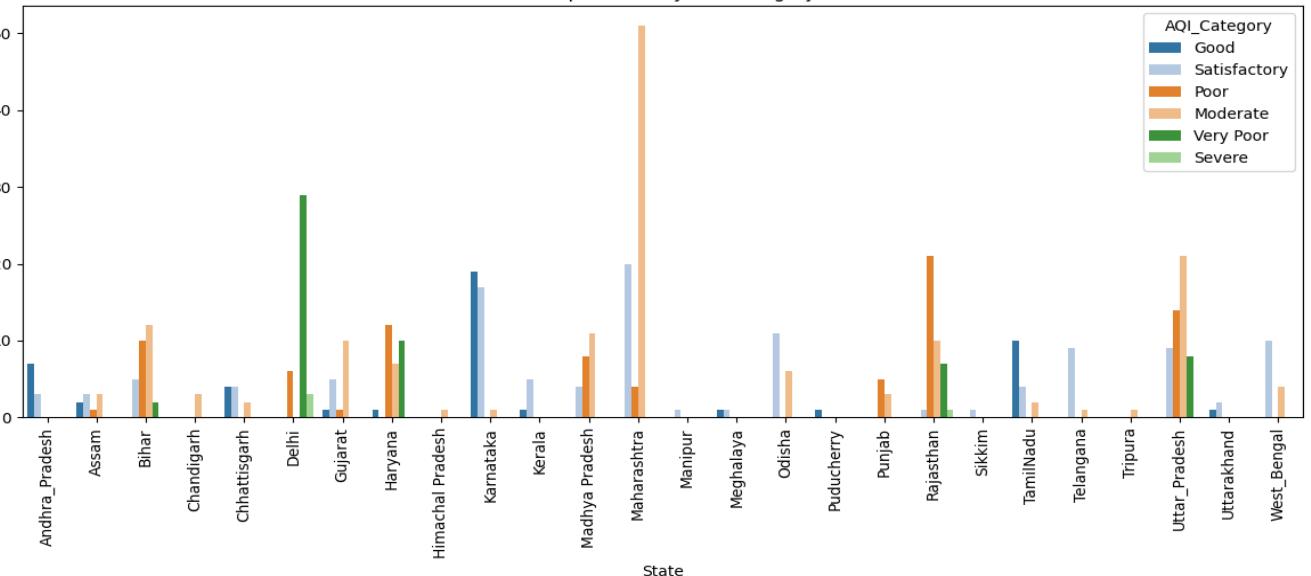
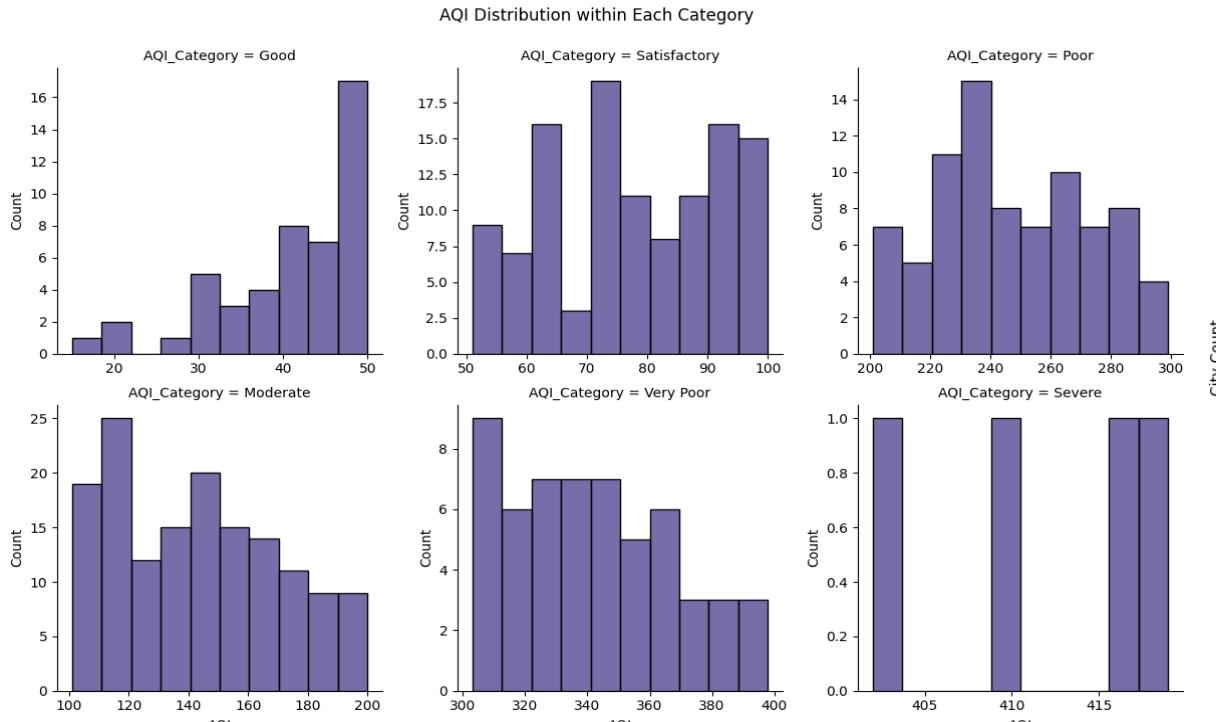
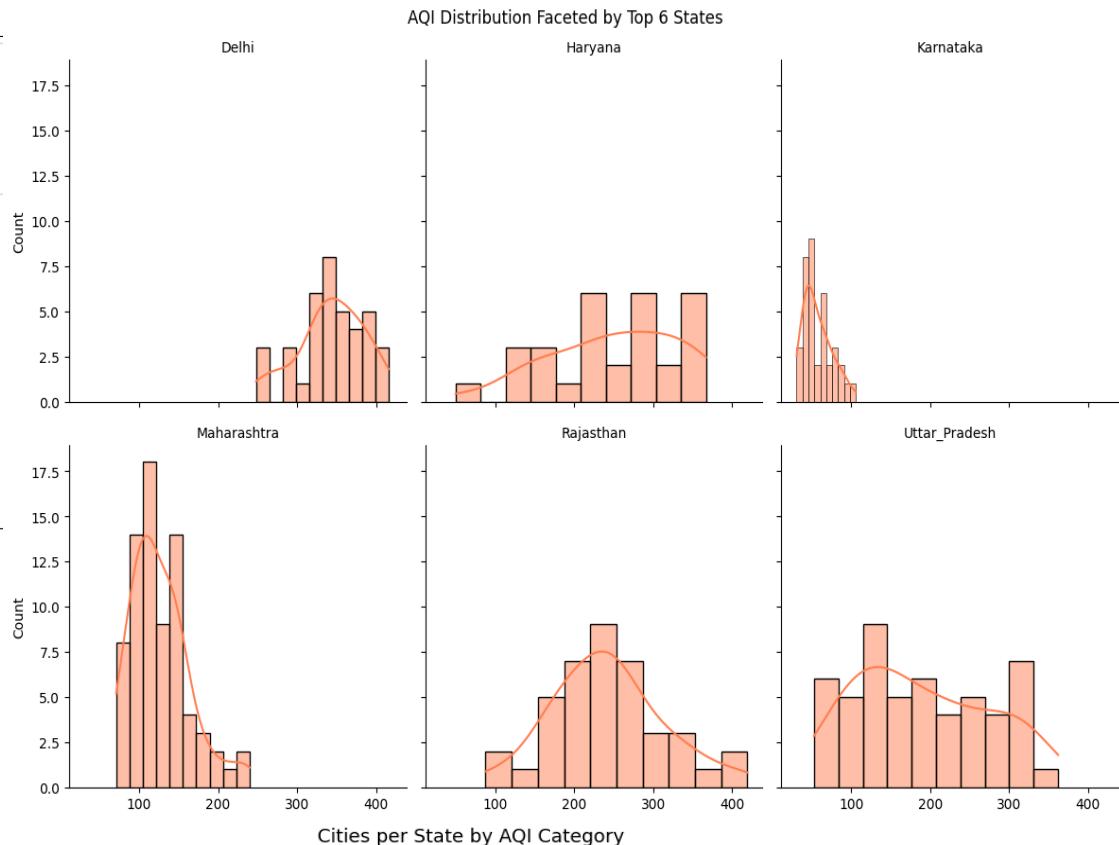
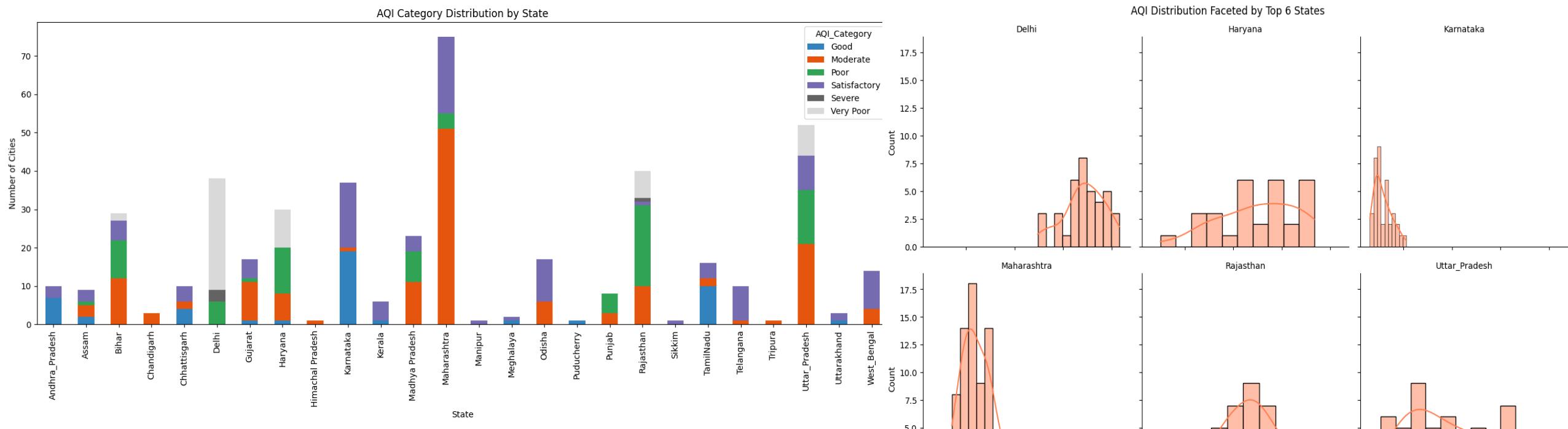


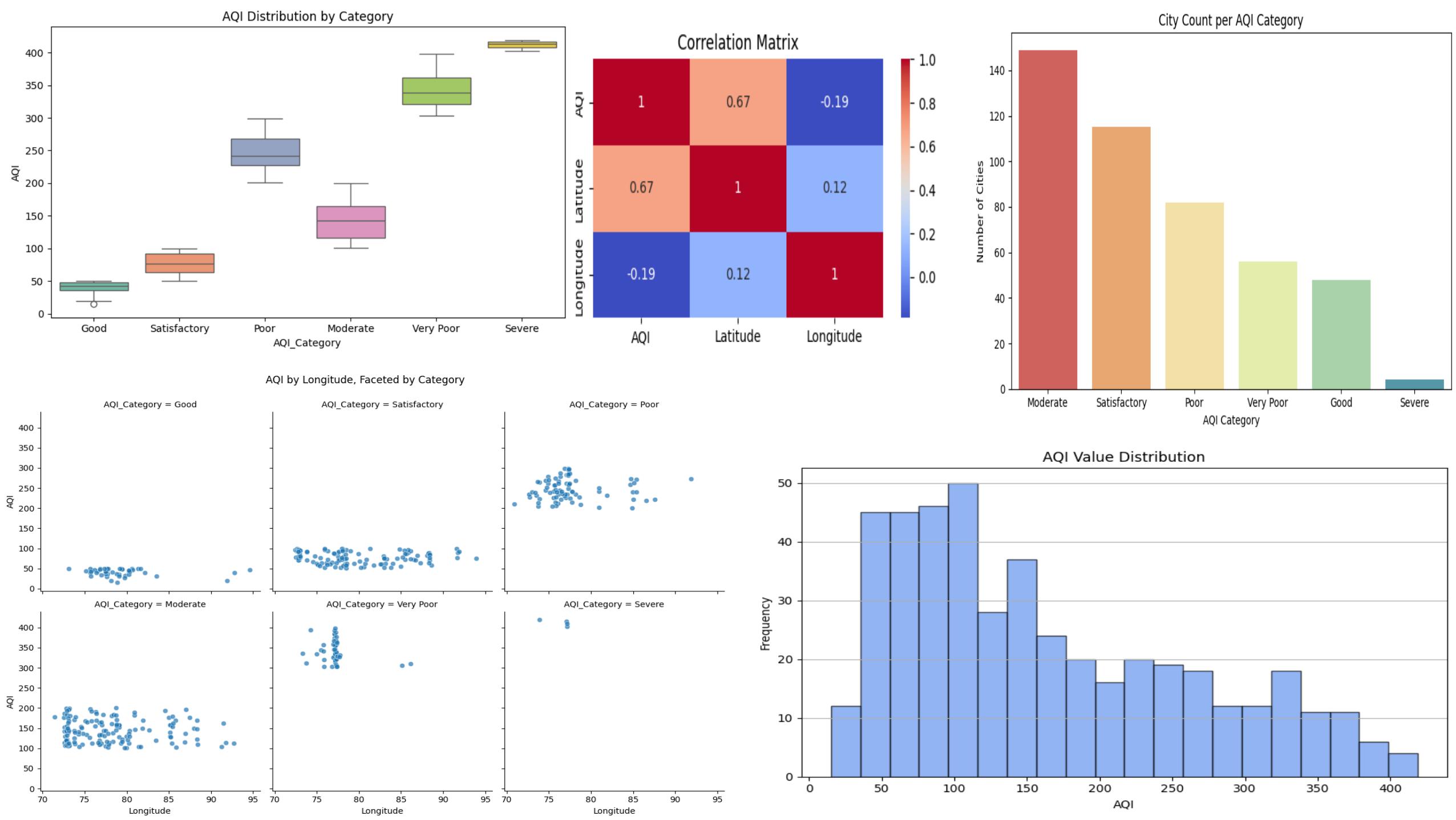
2D Distribution: AQI vs Latitude



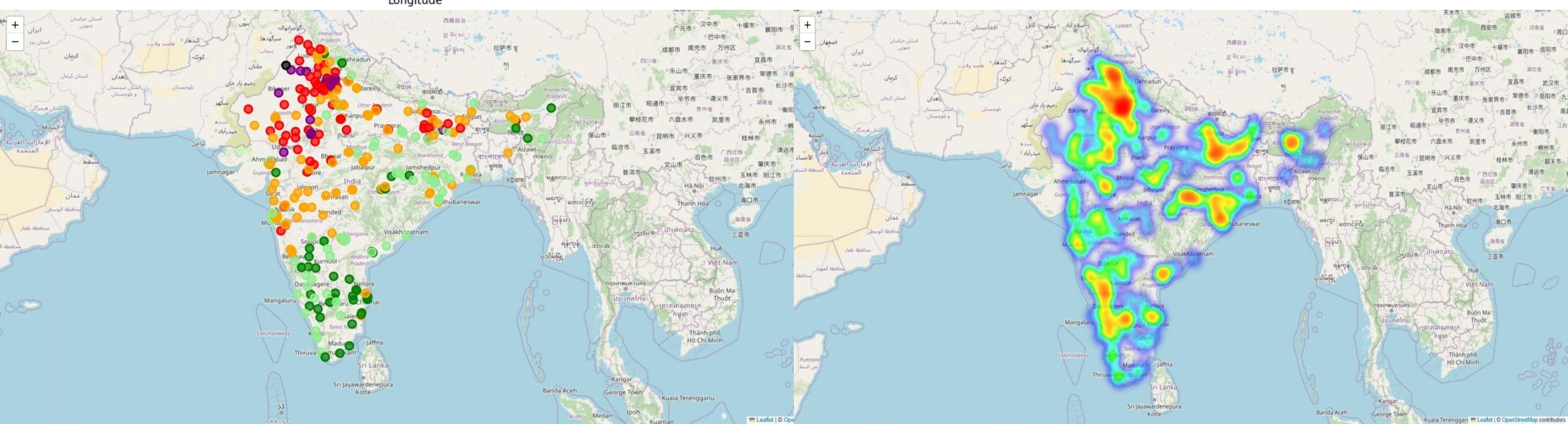
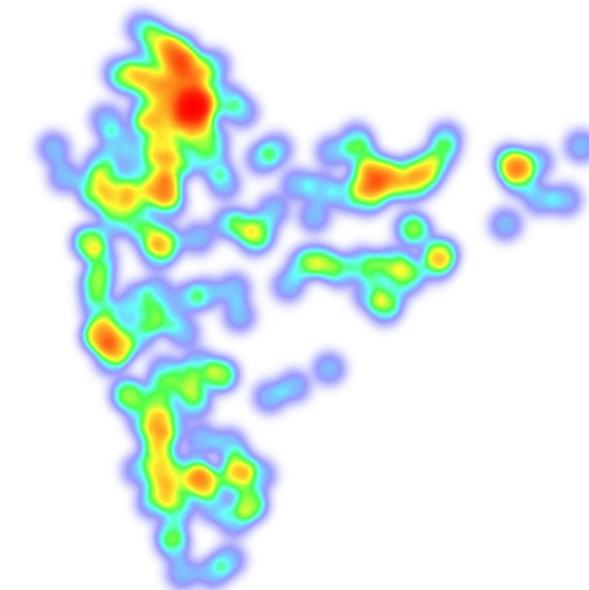
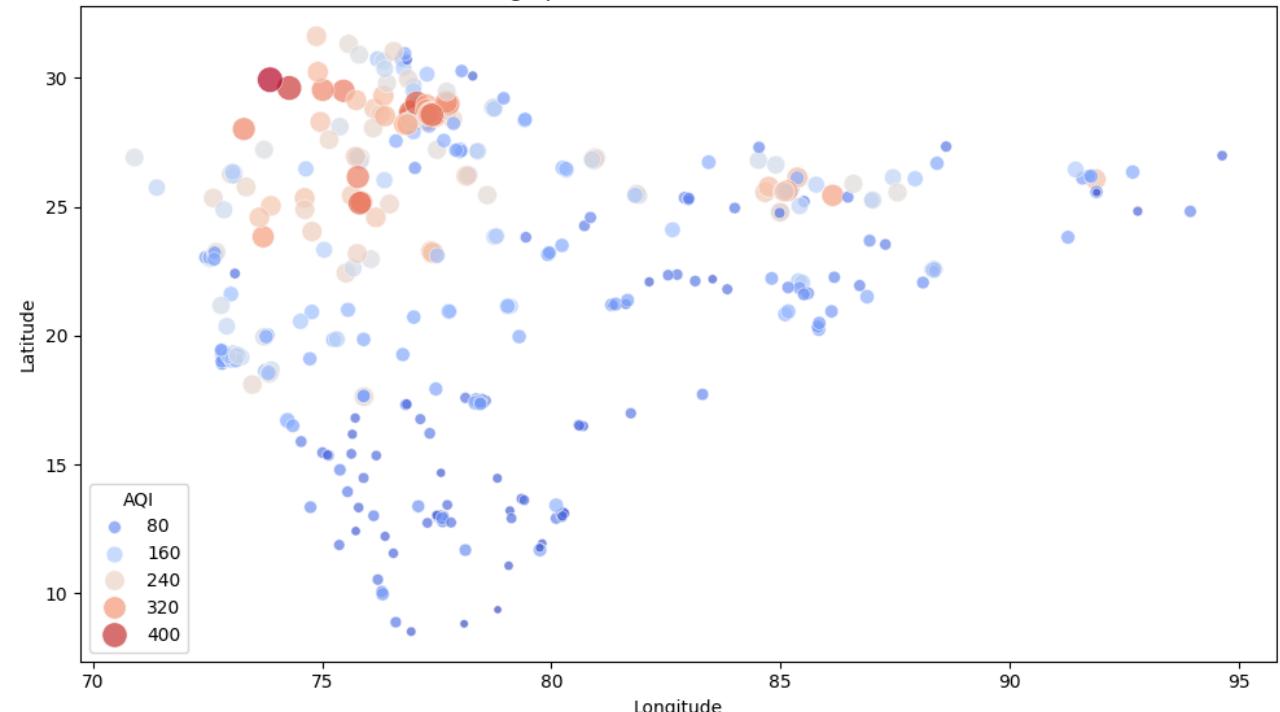
Top 10 Cleanest Cities

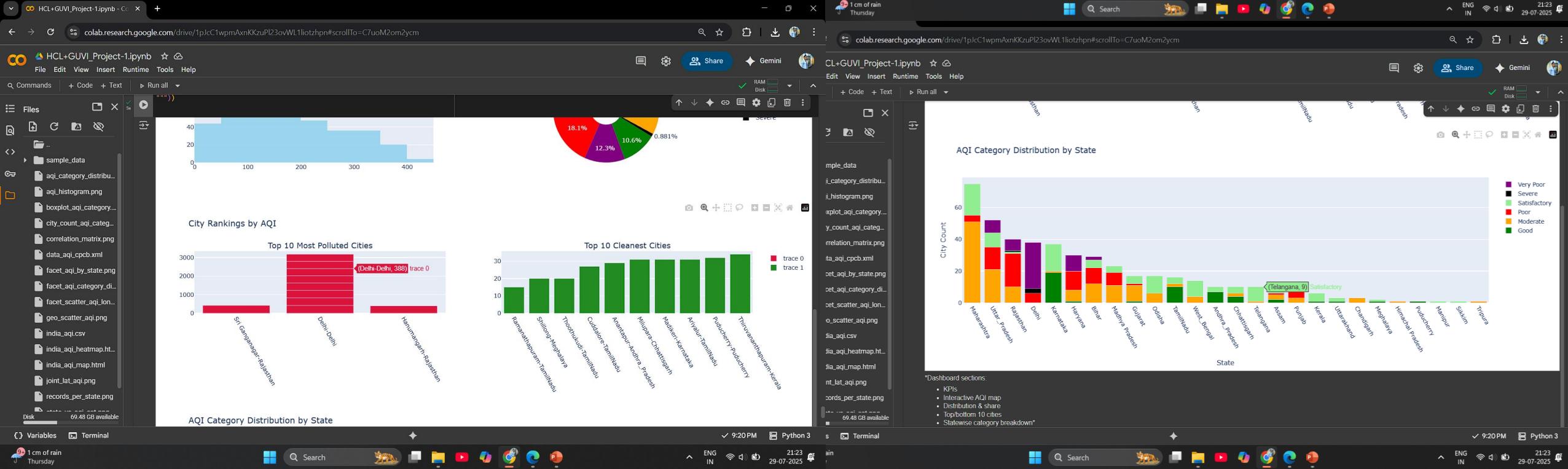
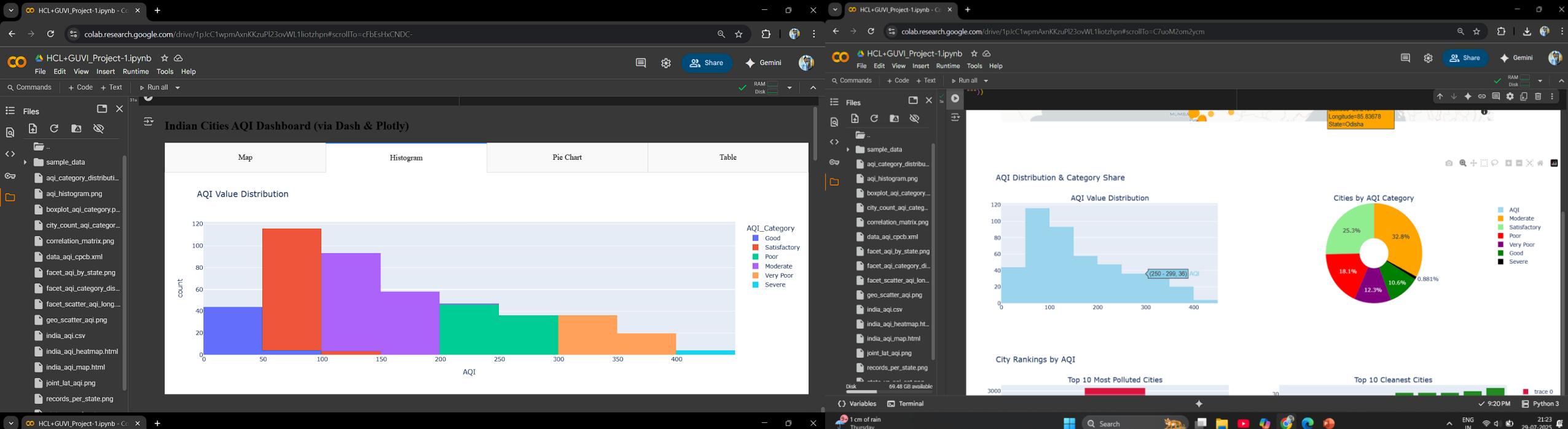






Geographical Distribution of AQI Values







Air Quality Index (AQI) Dashboard - Indian Cities

AQI Data Table

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	City	State	Latitude	Longitude	AQI	AQI_Category
0	Anantapur	Andhra_Pradesh	14.6759	77.593	29	Good
1	Chittoor	Andhra_Pradesh	13.2049	79.0979	35	Good
2	Kadapa	Andhra_Pradesh	14.4651	78.8242	37	Good
3	Rajamahendravaram	Andhra_Pradesh	16.9873	81.7363	58	Satisfactory
4	Tirupati	Andhra_Pradesh	13.67	79.35	49	Good
5	Tirupati	Andhra_Pradesh	13.6154	79.4092	48	Good
6	Vijayawada	Andhra_Pradesh	16.5361	80.5942	50	Good
7	Vizianagaram	Andhra_Pradesh	16.4867	80.6004	47	Good

Dashboard Visualizations



9+

27°C

Haze



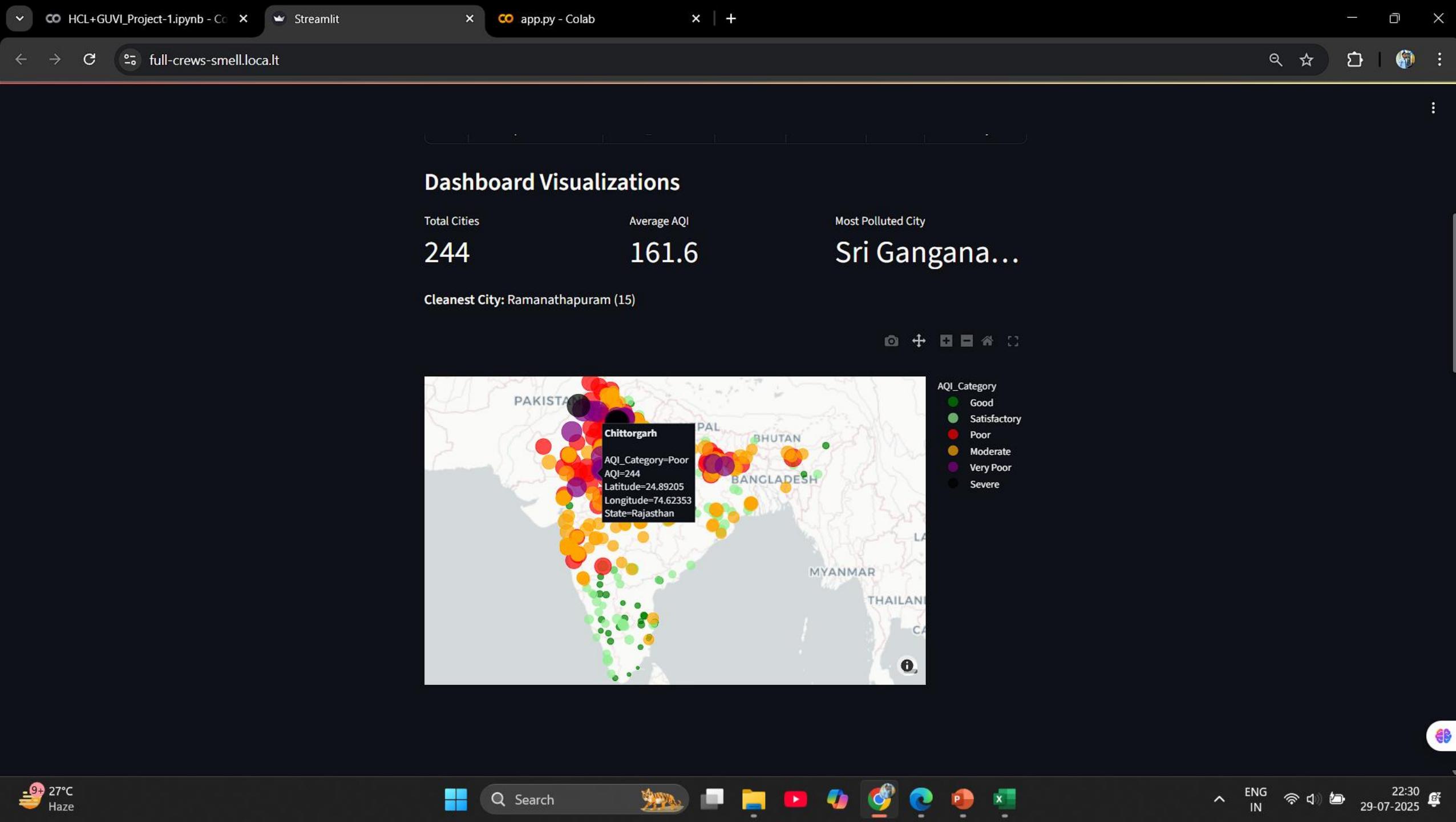
Search



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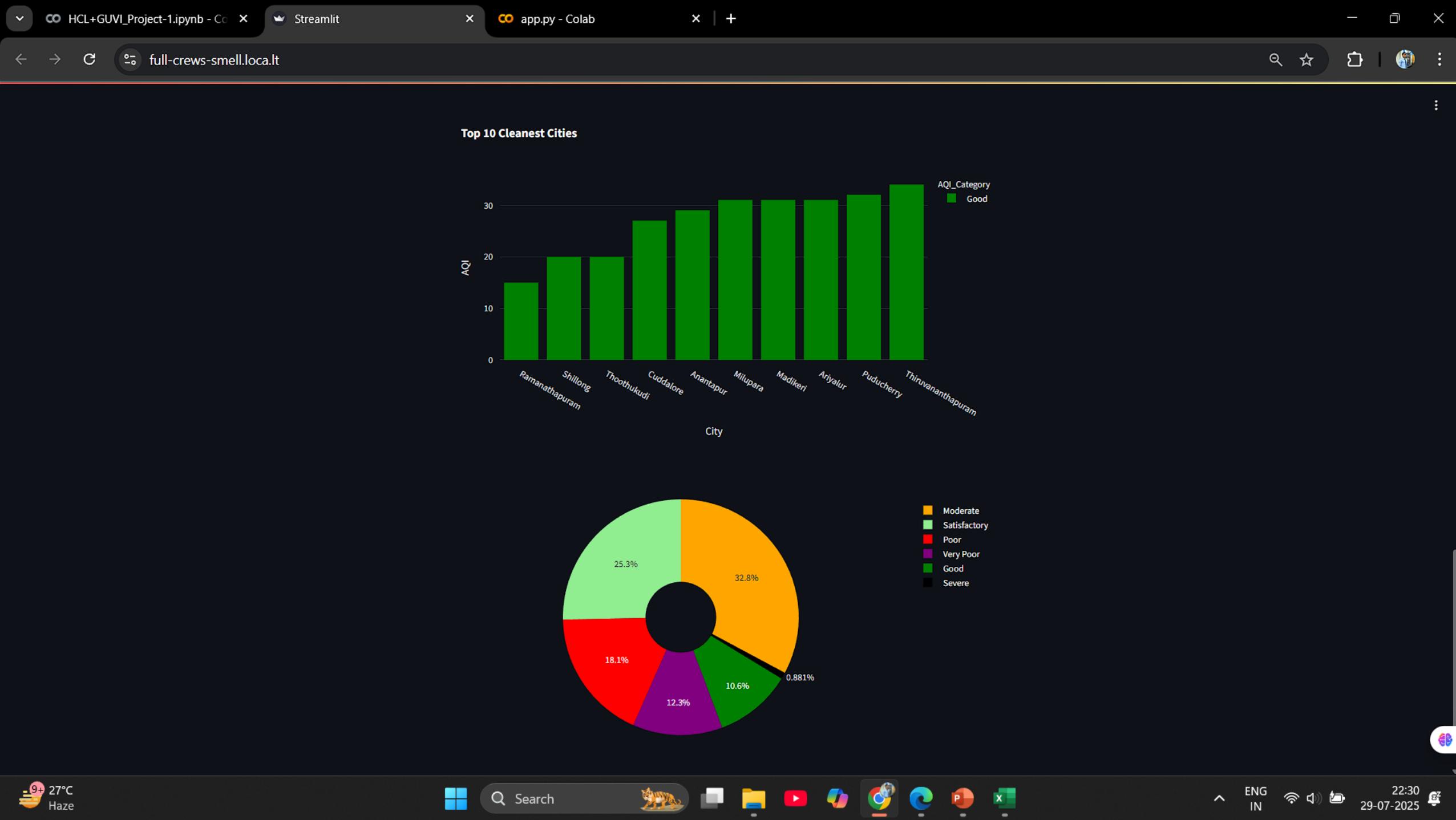


Top 10 Most Polluted Cities



Top 10 Cleanest Cities





Thank You...