

Executive Summary Report (Condensed)

Farmers Insurance Data Analysis

Prepared by: Tarang Sampatrao Lonkar

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Objective

The analysis aimed to extract insights from the Farmers Insurance dataset using SQL, focusing on population trends, premium amounts, and regional performance.

Methodology

- Filtering and Sorting (ORDER BY, WHERE, LIMIT)
- Aggregation (SUM(), AVG(), GROUP BY)
- String Operations (LEFT(), LIKE)
- Joins (INNER, LEFT)
- Window Functions (ROW_NUMBER(), RANK(), SUM() OVER)
- Constraints (PRIMARY KEY, FOREIGN KEY)
- Data Modifications (UPDATE, DELETE)

Key Insights

- Top 5 Populated Districts (2020) identified.
- Underserved Districts with lowest non-zero premiums.
- High Coverage States like Punjab and Maharashtra.
- Regional patterns identified using districts ending in 'pur'.
- Highest Premium Districts had premiums over 20 crores.
- Cumulative Trends analyzed using window functions.
- Implemented data integrity via relational schema.

Outcomes

- Data cleaned and structured.

- Target districts identified for outreach.
- Created reusable SQL templates for trend analysis.

Recommendations

- Target high-population, under-insured areas.
- Automate dashboards using SQL window functions.
- Extend analysis using Python or Power BI.