Unemployment Data Analysis in India

This analysis focuses on unemployment trends in India, using a comprehensive dataset containing key information such as dates, estimated employment rates, labor participation rates, and regional data. The project aims to uncover patterns, trends, and correlations within the data while understanding the impact of external events, like the Covid-19 pandemic, on unemployment rates.

Dataset Description

- **Date:** Timeline of the recorded unemployment rates.
- **Region:** Geographical areas where data has been collected.
- **Estimated Unemployment Rate (%):** The proportion of the labor force that is unemployed.
- **Estimated Employed:** Approximate number of individuals employed.
- **Estimated Labor Participation Rate (%):** The percentage of the working-age population either working or actively seeking employment.
- **Frequency:** Periodic intervals at which the data was recorded.

Purpose of the Analysis

- **Trend Analysis:** Identify long-term trends in unemployment rates in India.
- **Covid-19 Impact:** Analyze how the pandemic affected employment from March 2020 to March 2021.
- **Regional Comparison:** Explore variations in unemployment rates across different regions.
- **Correlation Analysis:** Examine the relationships between employment, unemployment, and labor participation rates.

Key Findings Expected

- **Unemployment Rate Patterns:** Understanding how unemployment fluctuated over time, particularly during the Covid-19 crisis.
- **Regional Insights:** Identifying regions with high or low unemployment rates.
- **Correlation Insights:** Insights into factors contributing to higher unemployment rates, such as lower labor participation.
- **Seasonal Trends:** Detect any seasonal patterns in employment and unemployment rates.

Conclusion

This analysis offers valuable insights into the employment landscape in India, providing decision-makers, economists, and policymakers with essential information to address workforce challenges and develop better employment strategies.