

CodeAlpha Data Science Internship

Project Title: Unemployment Analysis with Python

Objective:

The objective of this project is to analyze unemployment rate data using Python, identify trends, study the impact of Covid-19, detect seasonal patterns, and derive insights useful for economic and social policy-making.

Dataset Description:

The dataset contains unemployment statistics across different regions in India. It includes unemployment rates, employment numbers, labour participation rates, and date-wise records.

Methodology:

1. Data Loading and Cleaning using Pandas
2. Exploratory Data Analysis (EDA)
3. Visualization of unemployment trends
4. Covid-19 impact analysis
5. Seasonal and region-wise analysis

Key Findings:

- Significant rise in unemployment during Covid-19 lockdowns
- Seasonal patterns observed in unemployment rates
- Regional disparities in employment levels

Conclusion:

The analysis highlights the vulnerability of employment during economic shocks like pandemics. The findings can help policymakers design better employment programs and crisis management strategies.