

COVID 19

PROBLEM STATEMENT:

Given data about COVID-19 patients, write code to visualize the impact and analyse the trend of rate of infection and recovery as well as make predictions about the number of cases expected in a week in future based on the current trends.

DATASET:

CSV and Excel files containing data about the number of COVID-19 confirmed deaths and recovered patients both around the world and in India.

OBJECTIVES:

- Use Pandas to accumulate data from multiple data files.
- Use Plotly (visualization library) to create interactive visualizations.
- Visualize the prediction by combining these technologies.

RESULTS:

- Analysed **49,000+ data points** from a comprehensive Excel file on COVID-19 cases, including confirmed cases, active cases, recoveries, and deaths, using **NumPy and Pandas** to structure data for global and India-specific insights.
- Created **10+ interactive visualizations** with **Plotly** to illustrate confirmed, active, recovered, and death trends over time, enabling stakeholders to explore data-driven insights into regional and temporal impacts.
- Employed **Seaborn** to enhance data visualization for over 5 countries. Used **Warnings** to manage data handling exceptions, visualizing predictive trends effectively to provide detailed, country-wise case forecasts for informed health and policy decisions.