**College code:7177**

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**COVID VACCINES ANALYSIS USING DATA ANALYCTICS WITH COGNOS**

**PROJECT TITLE:**

**COVID vaccines analysis** with IBM cognos.

**PROJECT OVERVIEW :**

**The problem is to conduct an in-depth analysis of Covid-19 vaccine data, focusing on vaccine efficacy, distribution, and adverse effects. The goal is to provide insights that aid policymakers and health organizations in optimizing vaccine deployment strategies. This project involves data collection, data preprocessing, exploratory data analysis, statistical analysis, and visualization.**

**ABSTRACT :**

**This project employs advanced data analytics techniques to assess the real-world effectiveness and societal impact of COVID-19 vaccines. Leveraging comprehensive datasets, our analysis examines vaccination rates, infection rates, hospitalizations, and mortality rates across diverse populations. Through statistical modeling, machine learning, and epidemiological insights, we aim to provide valuable insights for policymakers and public health officials to optimize vaccine distribution strategies and mitigate the ongoing pandemic's effects.**

**PROJECT OBJECTIVES :**

* **Effectiveness Assessment**
* **Vaccination Rate Analysis**
* **Infection Tracking**
* **Hospitalization Evaluation**
* **Mortality Rate Examination**
* **Population-Based Insights**

**KEY STEPS:**

* **Data Collection**
* **Data Preprocessing**
* **Exploratory Data Analysis**
* **Statistical Analysis**
* **Visualization**
* **Insights and Recommendations**

**DATA COLLECTION:**

**Collect data on COVID-19 vaccine efficacy, distribution, and adverse effects from a variety of sources, such as clinical trials, public health surveillance systems, and self-reported surveys.**

**DATA PREPROCESSING:**

**Clean and prepare the data for analysis by removing errors, inconsistencies, and missing values.**

**EXPLORATORY DATA ANALYSIS:**

**Use visualization and statistical methods to identify patterns and trends in the data.**

**STATISTICAL ANALYSIS:**

**Conduct hypothesis tests and develop predictive models to assess the effectiveness, distribution, and safety of COVID-19 vaccines.**

**VISUALIZATION:**

**Create informative and engaging visualizations to communicate the findings to policymakers and health organizations.**

**INSIGHTS AND RECOMMENDATIONS:**

**Insights into the effectiveness of different COVID-19 vaccines against different variants of the virus.Understanding of the factors that influence vaccine uptake and distribution.Identification of potential adverse effects of COVID-19 vaccines and their severity.Recommendations for optimizing vaccine deployment strategies to achieve maximum public health impact.**

**CONCLUSION :**

**This project provides a comprehensive analysis of COVID-19 vaccine data, offering insights into vaccine efficacy, distribution, and adverse effects. The findings are intended to assist policymakers and health organizations in optimizing vaccine deployment strategies to combat the pandemic effectively and ensure public safety.**