**10 potential topics:**

**1. Time Series Analysis of COVID-19 Trends**

**Description**: A project analyzing the spread of COVID-19 over time, focusing on infection rates, hospitalizations, and deaths using time series forecasting techniques. Various machine learning models were applied to predict future trends and outcomes.

**2. Medical Chatbot with Machine Learning**

**Description**: Developed a chatbot capable of diagnosing common ailments based on user input using Natural Language Processing (NLP) and machine learning algorithms. The project explores classification models to match symptoms with potential diagnoses.

**3. Weight Category Trends in Adults**

**Description**: Analyzed the dataset "Normal weight, overweight, and obesity among adults aged 20 and over by selected characteristics, United States" to identify key trends in weight categories over time, using statistical models and data visualizations to explore contributing factors.

**4. Sales Forecasting for Retail Industry**

**Description**: Developed a machine learning model for forecasting sales in the retail sector using historical sales data. The project includes feature engineering, model building, and evaluation, with a focus on improving business decisions through predictive analytics.

**5. Exploratory Data Analysis on Education Attainment**

**Description**: A visualization project focused on educational attainment trends using histograms, box plots, and bullet charts. The project explores how education levels have changed over time and their impact on employment rates.

**6. Customer Segmentation for Hospitality Industry**

**Description**: Performed customer segmentation analysis for a hospitality business using clustering algorithms. This project provided insights into customer behavior, preferences, and spending patterns to drive personalized marketing strategies.

**7. Traffic and Capacity Analysis for Transportation Systems**

**Description**: Analyzed traffic and capacity data to optimize transportation routes and reduce congestion. This project used data-driven insights to improve planning and operational efficiency within urban transport systems.

**8. Costco Store Geolocation Analysis**

**Description**: A geospatial analysis project identifying the optimal locations for Costco stores based on factors like population density, income levels, and competitor proximity. The project integrates GIS data and uses clustering techniques.

**9. Healthcare Resource Allocation Model**

**Description**: Built a predictive model to optimize healthcare resource allocation based on patient admission trends and hospital capacity data. This project leverages machine learning to assist hospitals in better preparing for patient demand surges.

**10. Accident and Fatality Trends in Transportation**

**Description**: A descriptive analysis of accident and fatality trends using a dataset of transportation-related incidents over time. The project includes visualizations such as scatter plots and violin plots to uncover factors contributing to accidents and fatalities.