

# Covid case analysis Project Phase 3 - Documentation

## Phase 3: Development Part 1

In Phase 3, we will begin building the Covid case analysis project. This phase focuses on loading and preprocessing the dataset, defining analysis objectives, and using IBM Cognos for data visualization.

### Step 1: Dataset Download

- Access the dataset from the provided Kaggle link: [Kaggle Covid 19 Dataset ](<https://www.kaggle.com/datasets/imdevskp/corona-virus-report>).
- Download the dataset to your local working directory or preferred location.

### Step 2: Loading the Dataset

- Import the necessary Python libraries, including Pandas, for covid case analysis.
- Load the dataset into a Pandas DataFrame for further analysis.
- Display the first few rows of the dataset to inspect the data structure.

### Step 3: Exploratory Data Analysis

- Perform an initial exploration of the dataset to understand the observation
- Check for basic statistics and disease spread rate • Visualize key features to gain insights into the data.
- Identify potential relationships or correlations between the year/date/month and death rate

### Step 4: Define Analysis Objectives

Define the objectives of the analysis for this phase, including: • Covid Case analysis

Prediction: Develop a model based on the covid case observation.

- Death rate: Number of death occurred based on the covid spread
- Year/Date/Month: spread of disease and death rate is measured based on this

## **Step 5: Data Cleaning and Preprocessing**

Clean and preprocess the data to ensure its quality and suitability for analysis:

- Integrate the data from the source
- Aggregate it into weekly or monthly record
- Verify the correctness of the integrated data

## **Step 6: IBM Cognos for Visualization**

Utilize IBM Cognos for creating data visualizations that provide insights into the dataset:

- Create various visualizations, such as bar charts, line charts, heatmaps, and interactive dashboards.
- Visualize the rate of death of covid outspread, feature ,other relevant insights using IBM Cognos.

## **Step 7: Data Validation**

Validate the processed data to ensure its quality and accuracy: • Perform data validation checks to confirm data consistency and accuracy.

- Identify and address any potential data quality issues.

## **Step 8: Documentation**

Maintain comprehensive documentation of the activities performed in this phase:

- Record the data preprocessing steps, including any transformations and cleaning.
- Document the objectives defined for this phase.
- Capture insights gained from data visualization using IBM Cognos.
- Document any observations, challenges, or discoveries made during this phase.

This documentation outlines the key steps and activities to be performed in Phase 3 of the Covid case analysis project. It serves as a guide for the project's development, dataset preparation, and the use of IBM Cognos for data visualization.



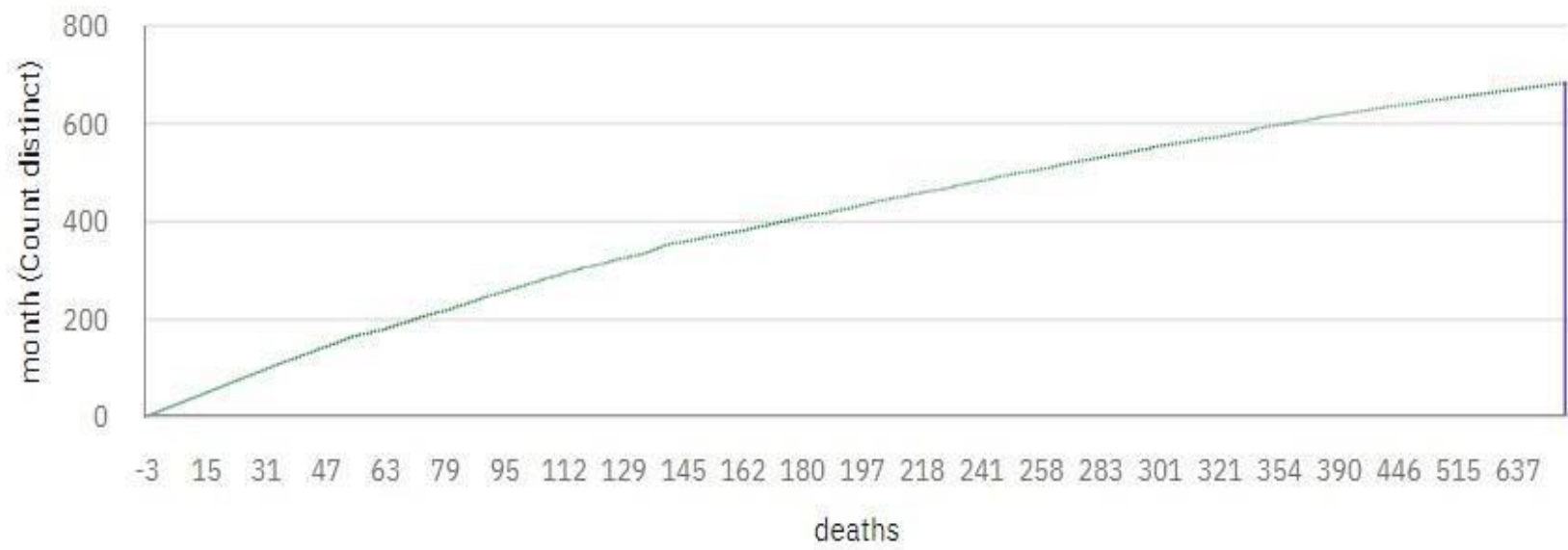
[Type here]

month for deaths



Column values

● Increase ● Decrease ● Total



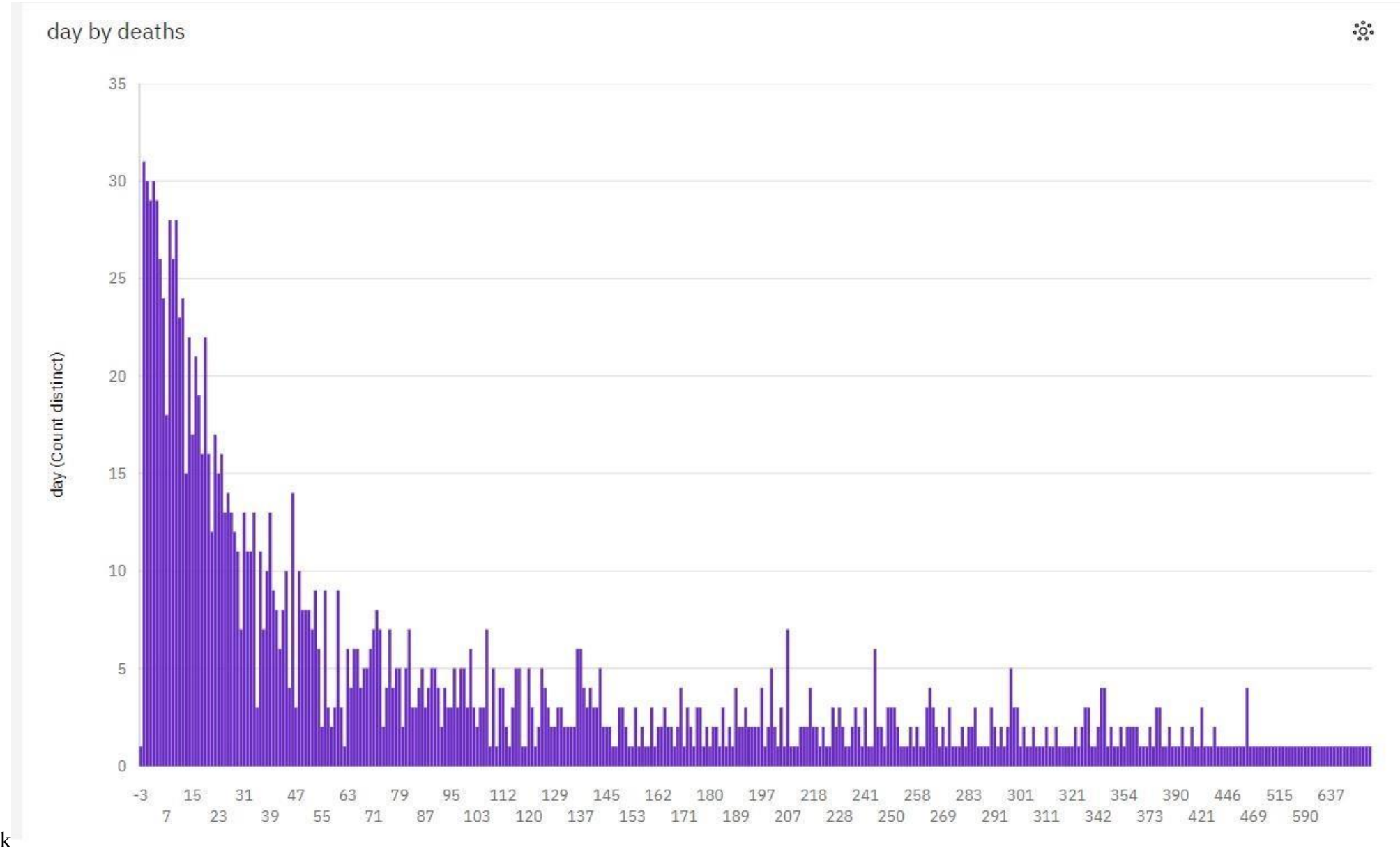
day by deaths colored by deaths



deaths (Sum)



[Type here]

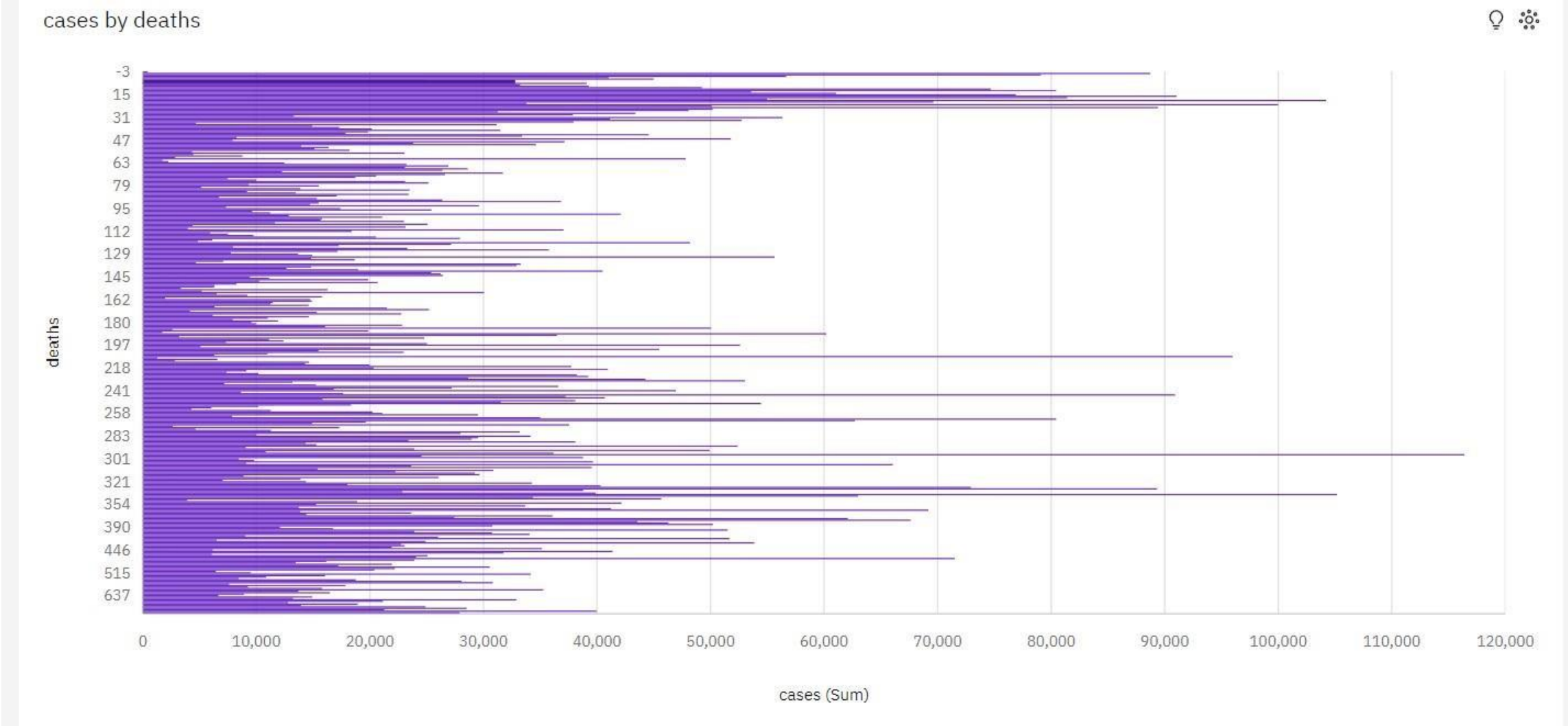


[Type here]

deaths for cases and deaths regions



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Result:

Thus we have observed various forms of pictorial representation of the graphs,charts in the Covid case analysis Project