# Analyzing Baby Deaths and Total Deaths in Turkey (2009-2022)

**Introduction:**

This study focuses on analyzing the trends in baby deaths and total deaths in Turkey over a 14-year period.

**Methodology:**

1. **Data Collection:**
   * Data for baby deaths and total deaths in Turkey from 2009 to 2022 was collected from TUIK.
2. **Data Visualization:**
   * The data was visualized using a combination of bar and line charts.
   * The x-axis represents the years (2009-2022), while the y-axis represents the number of deaths.
   * Baby deaths were represented using blue bars, and total deaths were represented using a red line.
   * The bar chart provides a clear comparison of baby deaths across the years, while the line chart illustrates the overall trend in total deaths.

metin, çizgi, diyagram, öykü gelişim çizgisi; kumpas; grafiğini çıkarma içeren bir resim

Açıklama otomatik olarak oluşturuldu

**Explanation of the Code:**

1. **Data Representation:**
   * The data for total deaths and baby deaths is stored in JavaScript objects (**totalDeath** and **babyDeath**) along with corresponding years in an array (**years**).
2. **SVG Canvas and Chart Dimensions:**
   * An SVG canvas is created with defined dimensions, including margins to ensure proper spacing for axes and labels.
3. **Scales and Axes:**
   * The data is scaled to fit the chart area. Scales map the data values to pixel positions on the SVG canvas.
   * X-scale: Maps years to horizontal positions.
   * Y-scales: Map the number of deaths to vertical positions for both total deaths and baby deaths.
   * X and Y axes are drawn as lines using SVG elements to provide reference points.
4. **Bar Chart (Baby Deaths):**
   * Vertical bars are created for baby deaths, each representing the number of baby deaths in a specific year. The height of the bars corresponds to the number of deaths, and their positions are calculated using the y-scale for baby deaths.
5. **Line Chart (Total Deaths):**
   * A line chart is drawn to represent the trend in total deaths over the years. Points on the line indicate the total deaths for specific years, with circles placed at these points for better visualization. The line is created using SVG **path** element and circles using SVG **circle** elements.
6. **Axis Labels and Legends:**
   * X and Y-axis labels are added to provide context to the chart.
   * Legends are included to label the data series, providing a clear understanding of the colors used for total deaths and baby deaths.
7. **Data Labels:**
   * Numeric values for both total deaths and baby deaths are displayed above the corresponding points on the chart, enhancing readability.
8. **Additional Styling:**
   * The code includes styling elements such as stroke (border) and stroke width to enhance the visual appeal and clarity of the chart components.