# ESSENTIALS OF DATA WAREHOUSING AND DATA MINING

# LAB ASSIGNMENT - 3

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Question - Discuss Tableau "Filters" card with lots of examples. Also explain various edit menu option associated with filters.

**Ans** - Tableau is a powerful data visualization tool that allows users to create interactive and insightful dashboards. The "Filters" card in Tableau is a crucial component for controlling the data displayed in your visualizations. Filters help you focus on specific subsets of your data, allowing you to analyze and present information more effectively. Let's discuss the "Filters" card and explore various examples along with the associated edit menu options.

#### **Tableau Filters Card:**

- 1. Accessing Filters:
  - Click on the "Filters" card located on the left side of the Tableau interface.
  - The card displays a list of all filters applied to the sheet.

#### 2. Types of Filters:

- **Quick Filters**: Easily apply filters to a field by right-clicking on it and choosing "Show Filter" or by clicking on the filter icon in the field header.
- **Context Filters**: Create context filters to narrow down data for the entire worksheet. Context filters are applied before other filters, helping to focus the analysis on specific subsets of data.
- **Top N / Conditional Filters:** Show the top N items or filter data based on specified conditions. For example, you can display the top 10 customers by sales or filter data based on specific criteria.
- **Relative Date Filters**: Filter data based on relative time periods, such as the last 7 days or the next month. This is particularly useful for analyzing trends over time.

#### **Examples:**

#### 1. Basic Filter:

- Filter out data to show only a specific category, region, or time period.

#### 2. Range Filter:

- Display data within a particular numerical or date range (e.g., sales between \$1000 and \$5000).

#### 3. Top N Filter:

- Show the top N items based on a measure (e.g., top 10 customers by sales).

#### 4. Relative Date Filter:

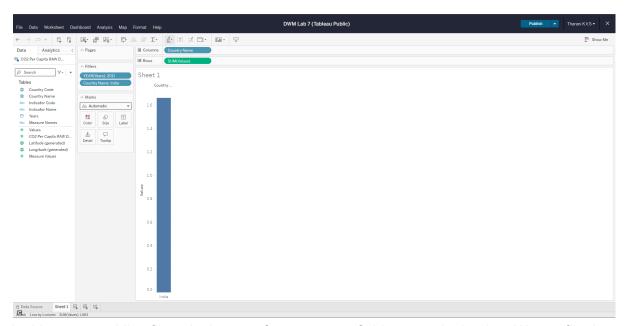
- Display data for the last N days, weeks, or months.

# 5. Context Filter:

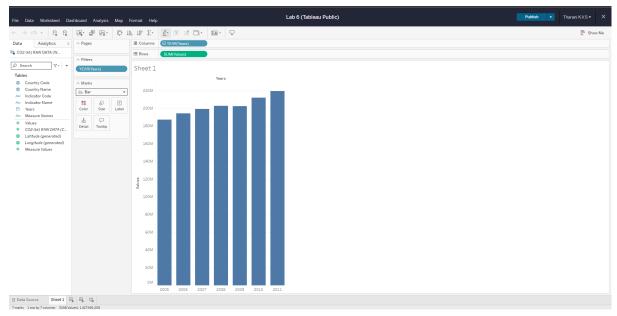
- Apply a context filter to the entire worksheet, narrowing down the data for all visualizations.

#### 6. Combined Filter:

- Use multiple filters together to refine data (e.g., filter by region and then by product category).



In this we are adding filters in the year, Country name field present in the data. We are filtering the years to 2011 and country name to India.



In this we are adding filter to years field present in the data. We are filtering the year from 2005-2011.

### **Edit Menu Options:**

#### 1. Filter Options:

- Show Filter: Display the filter control on the worksheet.
- Hide Filter: Hide the filter control while keeping the filter active.

# 2. Filter Type:

- Range of Dates: Set the date range for date filters.
- At Least/At Most/N Range: Specify the number of items to show in a Top N filter.

#### 3. General:

- Exclude: Exclude selected values from the filter.
- All: Include all values in the filter.

### 4. Relative Date:

- Anchor Relative Dates: Set a specific date as a reference point for relative date filters.

#### 5. Top N:

- Top/Bottom: Choose whether to show the top or bottom N items.
- By Field: Select the measure to use for determining the top N.

#### 6. Sort:

- Sort Order: Define the sorting order for filter values.

#### 7. Wildcard Match:

- Match Case: Enable or disable case sensitivity for wildcard matches.

# 8. Multiple Values:

- All/Any: Choose whether data must meet all or any selected conditions.

# 9. Exclude:

- Null Values: Include or exclude null values from the filter.

# 10. Relative Date:

- Range of Dates: Define the relative date range.