

# ASSIGNMENT 3

- Shaurya Singh Srinet

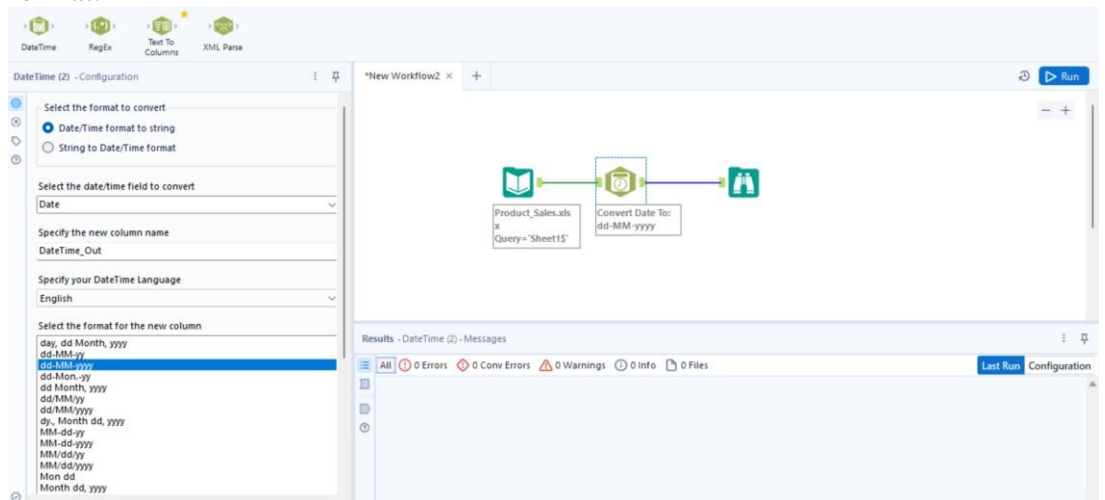
## Data Wrangling in Trifacta

### 1: Import the Dataset

1. Open Alteryx Designer.
2. Use the "Input Data" tool to import the `Product_Sales.xlsx` file.
  - Drag the "Input Data" tool onto the canvas.
  - In the configuration panel, select your Excel file and choose the appropriate sheet.

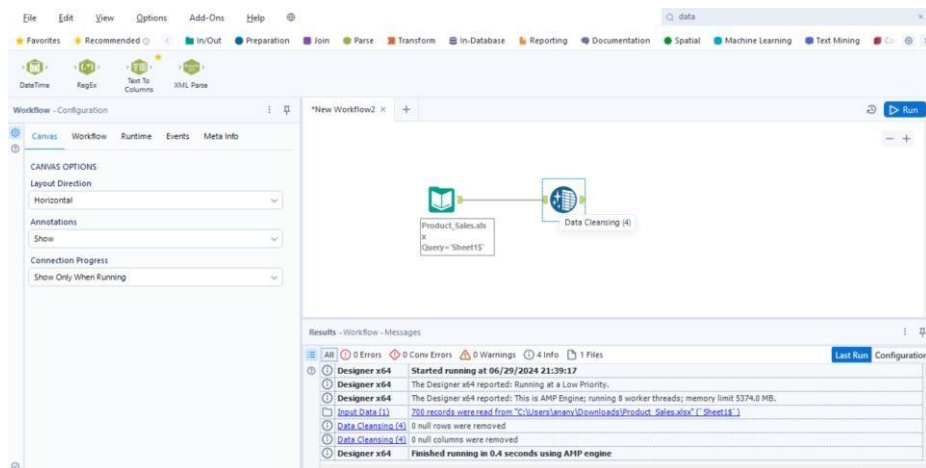
### 2: Clean the Data

1. **Parse Dates:**
  - Use the "DateTime" tool to ensure the `Date` column is in the correct date format.



## 2. Handle Missing Values:

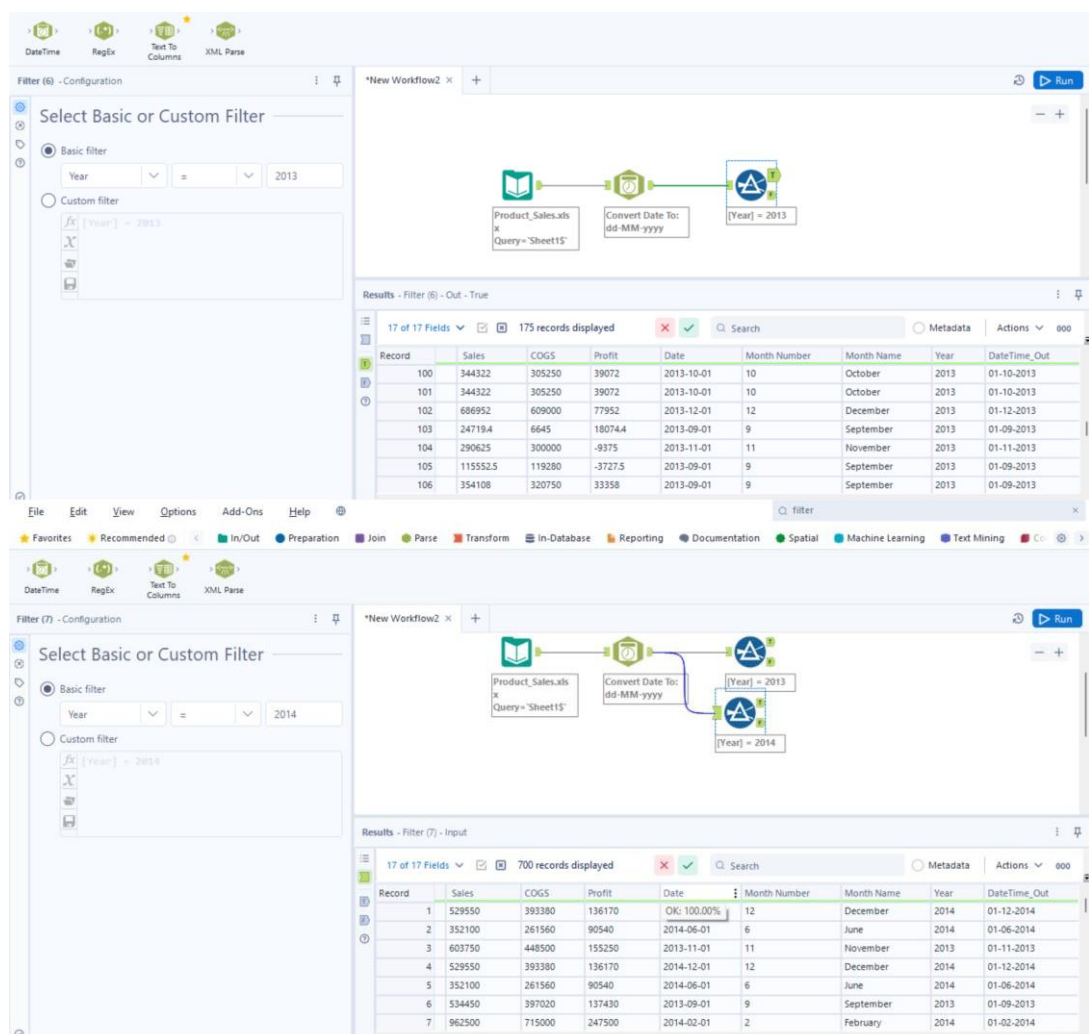
- Use the "Data Cleansing" tool to handle missing values, either by filling them or removing rows with missing data



## 3: Filter Data for the Relevant Years

### 1. Year Filtering:

- Use the "Filter" tool to include only rows where the Year column is either 2013 or 2014.



## 4: Additional Data Transformation

### 1. Summarize Sales Data by Month:

- Use the "Summarize" tool to aggregate data for Month-wise Sales and Units Sold.

The image displays two screenshots of the Alteryx Designer interface, illustrating the workflow for summarizing sales data by month.

**Top Screenshot:** The workflow is titled "New Workflow2". It starts with an "Input Data" tool connected to "Product\_Sales.xlsx" with the query "Sheet1\$". This is followed by a "Convert Date To:" tool set to "dd-MM-yyyy". Then, a "Filter" tool is configured with "[Year] = 2013". Finally, a "Summarize" tool is used to aggregate the data. The "Results - Workflow - Messages" pane shows the execution log, including a warning about rounding errors and a summary of the data processed.

**Bottom Screenshot:** The workflow is identical to the top one, but the "Filter" tool is configured with "[Year] = 2014". The "Summarize" tool is also configured to summarize by month. The "Results - Workflow - Messages" pane shows the execution log for the year 2014, indicating that 700 records were read and 525 records were summarized into 12 groups.

## 5: Export the Cleaned Data

### 1. Export:

- Use the "Output Data" tool to export the cleaned dataset in a format suitable for Tableau, such as CSV or Excel.

The image displays a screenshot of the Alteryx Designer interface, showing the workflow for exporting cleaned data.

The workflow is titled "New Workflow2". It starts with an "Input Data" tool connected to "Product\_Sales.xlsx" with the query "Sheet1\$". This is followed by a "Convert Date To:" tool set to "dd-MM-yyyy". Then, a "Filter" tool is configured with "[Year] = 2014". Finally, an "Output Data" tool is used to export the data to "Product\_Sales\_2014.csv". The "Results - Workflow - Messages" pane shows the execution log, including a warning about rounding errors and a summary of the data processed, indicating that 700 records were read and 525 records were summarized into 12 groups.

Product_Sales_2013 - Excel										
File Home Insert Page Layout Formulas Data Review View Developer Help Tell me what you want to do										
Clipboard Font Alignment Number										
A1	Month Number									
A	B	C	D	E	F	G	H	I	J	K
1	Month Nu	Month Na	Sum_Sale	Sum_Units Sold						
2	11	November	4145	65481						
3	10	October	8290	95622						
4	9	Septembe	4145	50601						
5	12	December	4145	52970						
6										

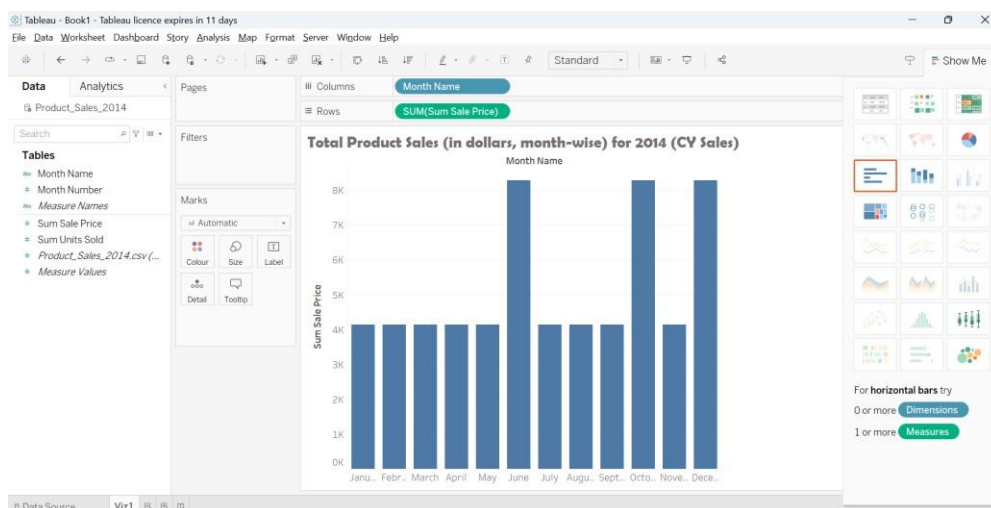
  

Product_Sales_2014 - Excel										
File Home Insert Page Layout Formulas Data Review View Developer Help Tell me what you want to do										
Clipboard Font Alignment Number										
A1	Month Number									
A	B	C	D	E	F	G	H	I	J	K
1	Month Nu	Month Na	Sum_Sale	Sum_Units Sold						
2	8	August	4145	60705						
3	3	March	4145	53420						
4	2	February	4145	55115						
5	7	July	4145	69349						
6	1	January	4145	67835.5						
7	11	November	4145	55650						
8	4	April	4145	78886.5						
9	10	October	8290	105482						
10	6	June	8290	103302						
11	9	September	4145	57280						
12	12	December	8290	102336						
13	5	May	4145	51771						
14										

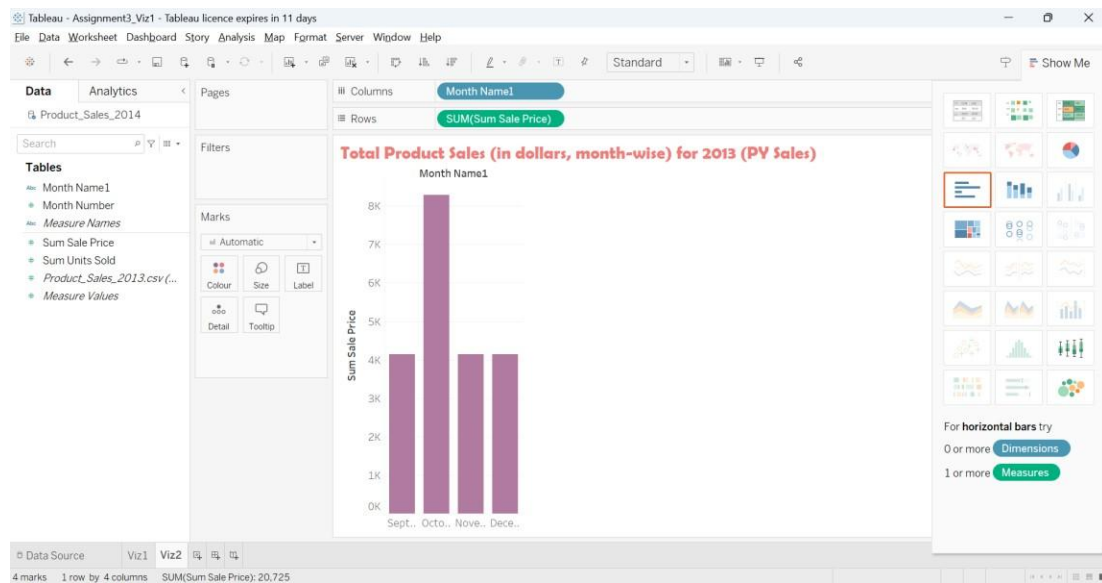
## Visualization in Tableau

After exporting the cleaned data, you can import it into Tableau and create the required visualizations:

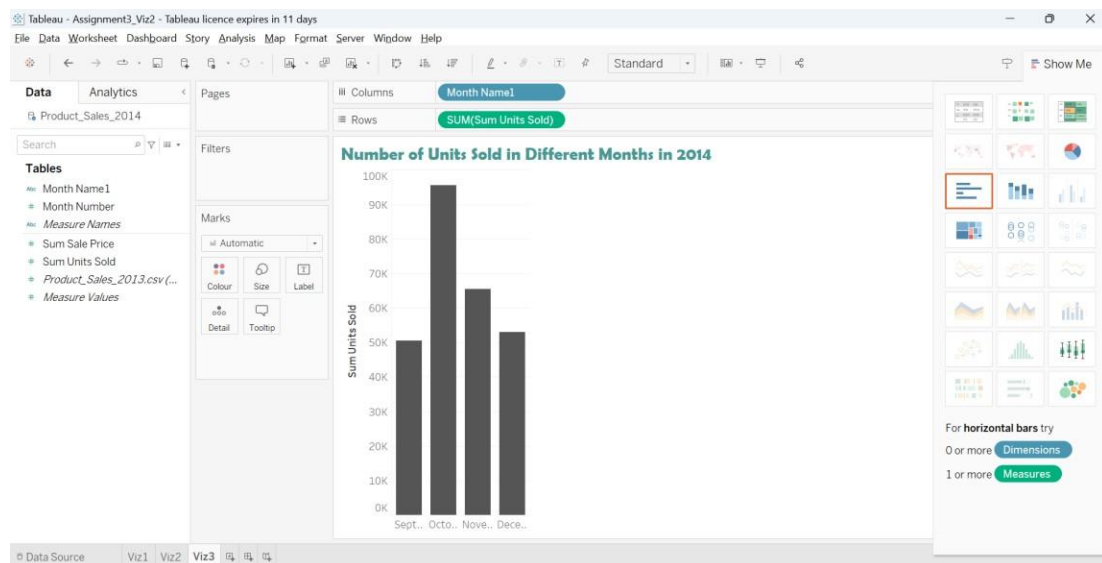
1. **Monthly Sales for 2014:** Bar chart of total sales month-wise for 2014.



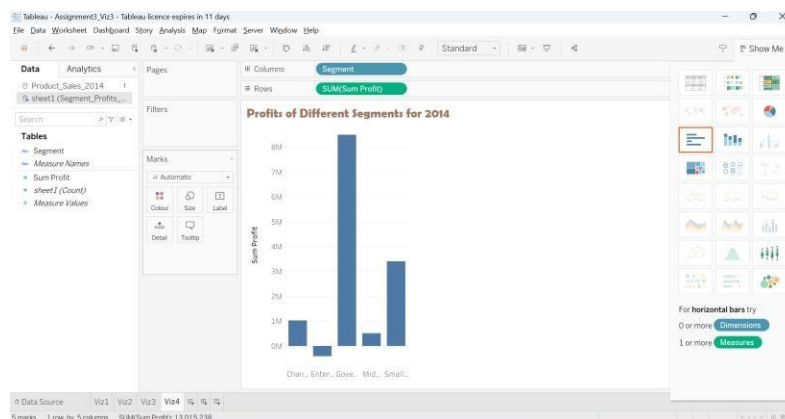
## 2. Monthly Sales for 2013: Bar chart of total sales month-wise for 2013.



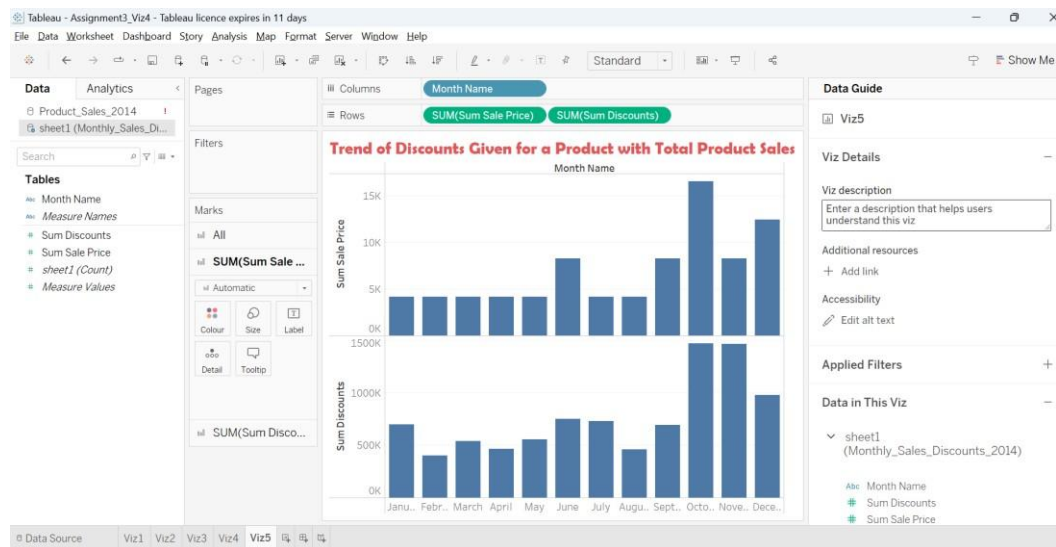
## 3. Units Sold: Bar chart of units sold in different months in 2014.



## 4. Profit by Segment: Bar or chart of profit by segment for 2014.



## 5. Discount and Sales Trend: Bar charts of discount and total sales trends.



## Dashboard:

