

<b>EX NO: 3</b>
Date

## Designing a Highlighted Tabular Visualization of Day to day life data sets

**Aim:**

To visually analyze and compare key metrics such as sales, quantity, and profit across different regions, categories, and time periods using various types of Tableau visualizations

**Procedure:**

1. Load the dataset into Tableau.
2. For the Dual axis use dimensions (e.g., Region, Month, Category) to Rows or Columns.
3. Use measures (e.g., Sales, Quantity, Deaths) to Label, Color, Size, or Axes.
4. Choose appropriate chart types from the Marks card (Bar, Line, Map, Text, etc.).
5. Customize colors, tool tips, and formatting for clarity and presentation.
6. Use location details such as latitude and longitude to update unlocated areas in map visualization

**STEPS:****Dataset Title: Glosary sales in different region****Dataset Description:**

A geographic area (e.g. country, region, or global division) where a company sells its products or services. Companies often break their markets into regions .

# Orders Row ID	Abc Orders Order ID	Orders Order Date	Orders Ship Date	Abc Orders Ship Mode	Abc Orders Customer ID	Abc Orders Customer Name	Abc Orders Segment	Orders Postal Code	Orders City
40098	CA-2014-AB10015140-41954	11/11/2014	11/13/2014	First Class	AB-100151402	Aaron Bergman	Consumer	73120	Oklahon
26341	IN-2014-JR162107-41675	2/5/2014	2/7/2014	Second Class	JR-162107	Justin Ritter	Corporate	null	Wollong
25330	IN-2014-CR127307-41929	10/17/2014	10/18/2014	First Class	CR-127307	Craig Reiter	Consumer	null	Brisban
13524	ES-2014-KM1637548-41667	1/28/2014	1/30/2014	First Class	KM-1637548	Katherine Murray	Home Office	null	Berlin
47221	SG-2014-RH9495111-41948	11/5/2014	11/6/2014	Same Day	RH-9495111	Rick Hansen	Consumer	null	Dakar

**1. Chart Name : Dual Axis Chart****Chart Title : Sales vs Quantity by Markets****Steps:**

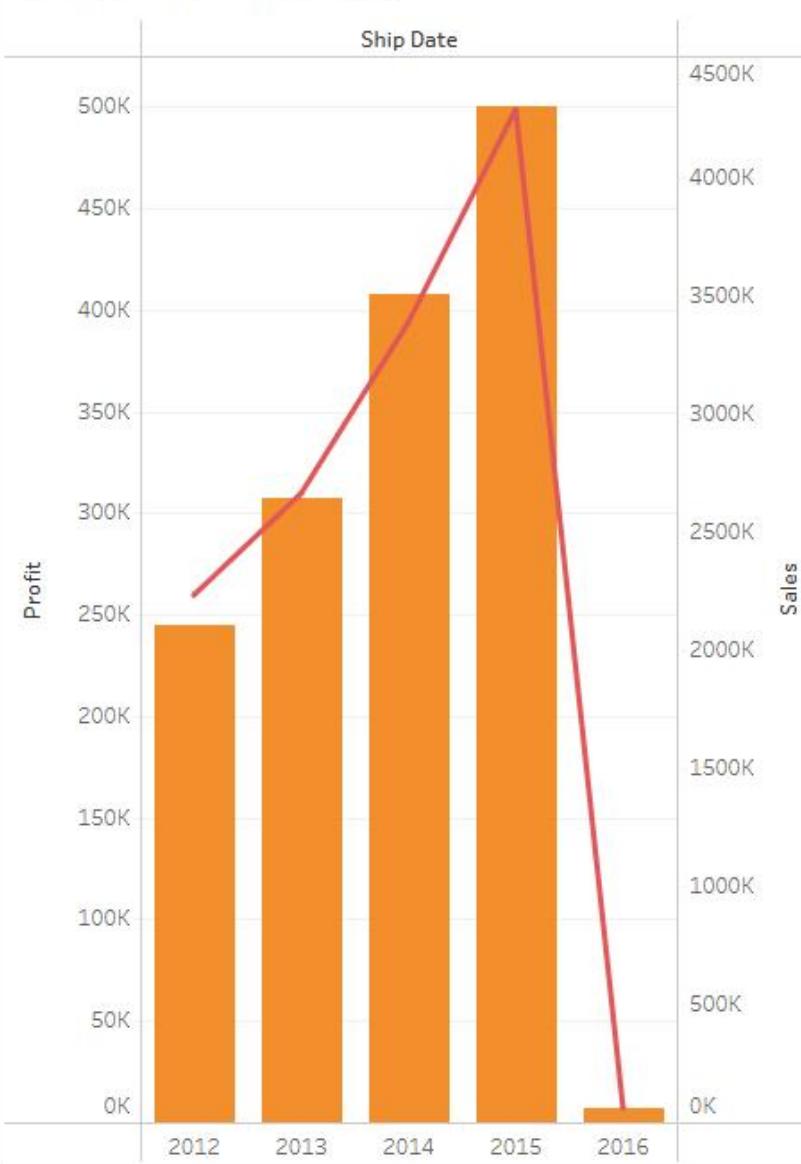
- Steps to Create the Chart (e.g., in Tableau):
- Drag Ship Year to the Columns shelf.
- Drag Sales to the Rows shelf.
- Drag Profit to the Rows shelf (next to Sales) → creates two Y-axes.
- Right-click the second axis (Profit) → select Dual Axis
- Change both mark types to Line or Circle based on preference.
- Format tooltips and legends for clarity.

**Chart Description:**

This dual-axis chart compares Sales and Profit across different Shipping Years. It helps reveal how revenue and profitability have changed over time, and whether growth in sales also leads to higher profit. Ideal for spotting years with poor profit margins despite strong sales—or years with efficient profit performance.

**Chart:**

Dual axis bar\_line\_108

**2. Chart Name : Dual Axis Chart****Chart:profit,discount vs order date**

- Drag Order Date to the Columns shelf.
- Drag Profit to the Rows shelf.
- Drag Discount to the Rows shelf (next to Profit) → two Y-axes will appear.
- Right-click the second axis (Discount) → choose Dual Axis.
- Change mark types:
  - Profit: Line (or Circle)
  - Discount: Bar (or Circle)
- Use different colors to visually separate Profit and Discount.
- Optionally synchronize axes (Right-click on axis → Synchronize Axis) for aligned scaling.
- Add tooltip, legends, and axis titles for better readability.

**Chart Description:**

This dual-axis chart shows how Profit and Discount change over time based on Order Date. It helps analyze

whether high discounts lead to reduced profits or improved sales efficiency. It's useful for identifying time periods with ineffective discount strategies or spotting seasonal trends in profitability and pricing.

### Chart:



### Chart Name : Map Chart.

**Chart Title :** Major locations of Tamil Nadu

#### Steps:

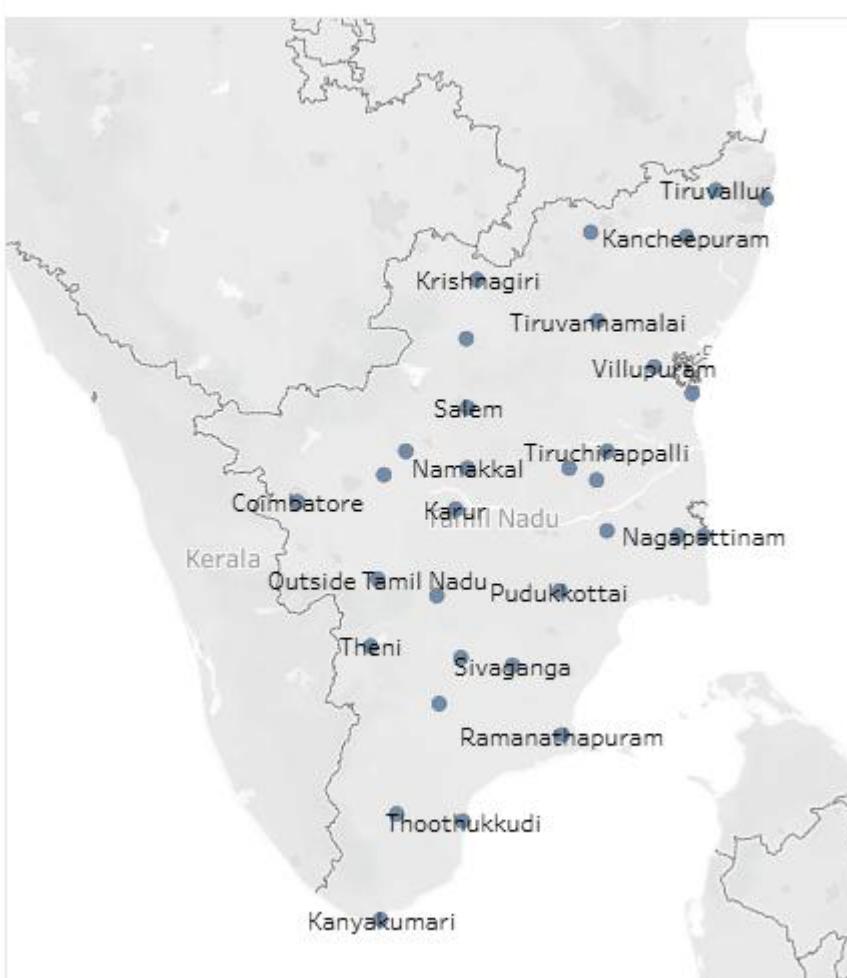
- Load your data (with district names).
- Drag District to the canvas – it creates a map.
- Set Marks type to Circle.
- Drag District to Label to show names.
- Adjust map view to focus on Tamil Nadu.

#### Chart Description:

This is a district-level map of Tamil Nadu showing major locations marked with dots for easy geographic reference.

**Chart:**

District\_i108

**Chart Name :** Highlight Table**Chart Title :** Highlighted Table by Region and Sub-Category**Steps:**

- Load your data (must include Region, Sub-Category, Sales, etc.).
- Drag Region to Rows.
- Drag Sub-Category to Columns.
- Drag Sales to Color, Label, and Size on the Marks card.
- Change Mark type to Square for heatmap style.
- Add Quantity or Discount to Tooltip or Label (optional).
- Adjust color intensity for better visibility.

**Chart Description:**

This is a heatmap-style table showing sales values across regions and sub-categories, where darker colors represent higher values.

## Chart :

highlightable\_ heatmap\_108

Sub-Catego..	Region																			
	Canada	Caribbean	Central Africa	Central America	Central Asia	Central US	Eastern Africa	Eastern Asia	Eastern Europe	Eastern US	North Africa	Northern Europe	Oceania	South America	Southeastern Asia	Southern Africa	Southern Asia	Southern Europe	Southern US	Western Africa
Accessories	1,295	3,346	1,649	17,546	138	7,252	1,433	8,865	3,102	11,196	2,788	4,941	7,702	6,116	-8,642	2,050	9,296	9,597	7,005	-1,442
Appliances	2,234	5,597	1,679	16,325	-1,426	2,649	2,583	13,348	5,401	8,372	4,895	7,781	12,444	4,226	10,557	1,451	7,689	21,392	4,111	-6,938
Art	913	964	1,895	5,398	-715	1,172	701	4,133	3,784	1,847	2,744	3,599	2,255	590	-1,190	1,019	3,269	7,396	1,046	-2,382
Binders	786	1,145	947	3,943	-141	-1,044	694	2,924	2,165	11,264	2,048	2,333	2,728	228	2,395	757	3,946	4,760	3,893	-1,787
Bookcases	1,343	1,949	3,565	16,144	-506	-1,998	3,337	25,657	11,199	-1,168	6,852	14,580	13,389	6,794	6,667	1,754	25,538	22,023	1,339	-8,343
Chairs	857	5,416	2,697	13,493	-1,046	6,593	580	26,582	6,993	9,358	3,716	4,417	15,028	9,872	3,230	1,749	19,406	-7,164	6,612	-5,957
Copiers	2,664	7,179	3,051	27,883	-1,400	15,609	1,584	30,229	7,815	17,023	8,075	14,419	21,597	5,983	11,356	3,353	21,452	18,088	3,659	-2,054
Envelopes	171	994	426	4,933	-235	1,601	208	3,430	1,073	1,468	1,063	1,674	1,262	346	-1,641	322	2,425	2,223	1,376	-500
Fasteners	140	467	350	1,657	-6	792	285	1,480	758	1,087	445	469	774	408	-1,602	219	1,286	909	518	-445
Furnishings	114	-1,205	1,063	-1,087	-187	-3,902	657	5,496	2,717	5,846	1,643	-3,021	3,862	2,527	1,452	702	6,577	5,541	3,428	-1,763
Labels	129	366	268	1,604	-60	1,071	228	1,308	461	1,118	330	459	1,158	415	-870	174	1,020	862	1,041	-215
Machines	608	-2,604	2,921	4,121	-602	-1,486	2,051	10,308	5,034	6,929	4,124	9,435	3,958	839	4,783	1,727	9,673	-3,679	-1,439	-4,874
Paper	374	1,292	646	3,873	-20	6,640	295	3,036	1,086	8,693	1,488	1,260	2,693	909	-1,859	456	3,465	2,714	5,741	-822
Phones	2,680	5,608	7,985	25,130	-785	12,323	2,945	23,404	9,101	12,315	6,657	14,443	21,477	-560	13,452	4,639	27,578	-5,095	10,767	-4,531
Storage	2,912	2,616	4,029	12,336	-350	1,955	3,181	8,959	10,114	8,370	6,387	5,681	7,706	1,256	2,418	2,424	8,661	-2,705	2,272	-4,107
Supplies	297	1,378	425	4,637	60	-662	250	3,414	1,310	-1,170	1,354	908	2,286	1,556	-4,034	189	3,270	2,221	3	-1,180
Tables	300	63	1,786	1,046		-3,560	890	-5,471	4,973	-11,025	3,229	546	-230	-13,415	-18,618	1,175	4,786	-8,974	-4,623	-3,069

### 3. Chart Name : Word Cloud.

#### Chart Titles.

#### Steps:

- Drag Region to Text in the Marks card.
- Drag Sales to Size.
- Drag Sales again to Color (optional for better emphasis).
- From the Marks dropdown → select Text (for word cloud effect).
- Format fonts, colors, and alignment to make it visually appealing.

#### Chart Description:

This word cloud visually represents sales volume across different regions. The size of each region's name reflects its total sales—larger text means higher sales. This chart is ideal for quickly identifying top-performing regions and visualizing regional sales distribution at a glance.

#### Chart:

region vs sales\_108



Preparation	30	
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<b>Lab performance</b>	<b>30</b>	
<b>Report</b>	<b>40</b>	
<b>Total</b>	<b>100</b>	
<b>Initial of the faculty</b>		

**RESULT:**

Thus the visualizations highlight regional and monthly variations in sales, quantity, and deaths, with clear peaks in certain months and areas.