

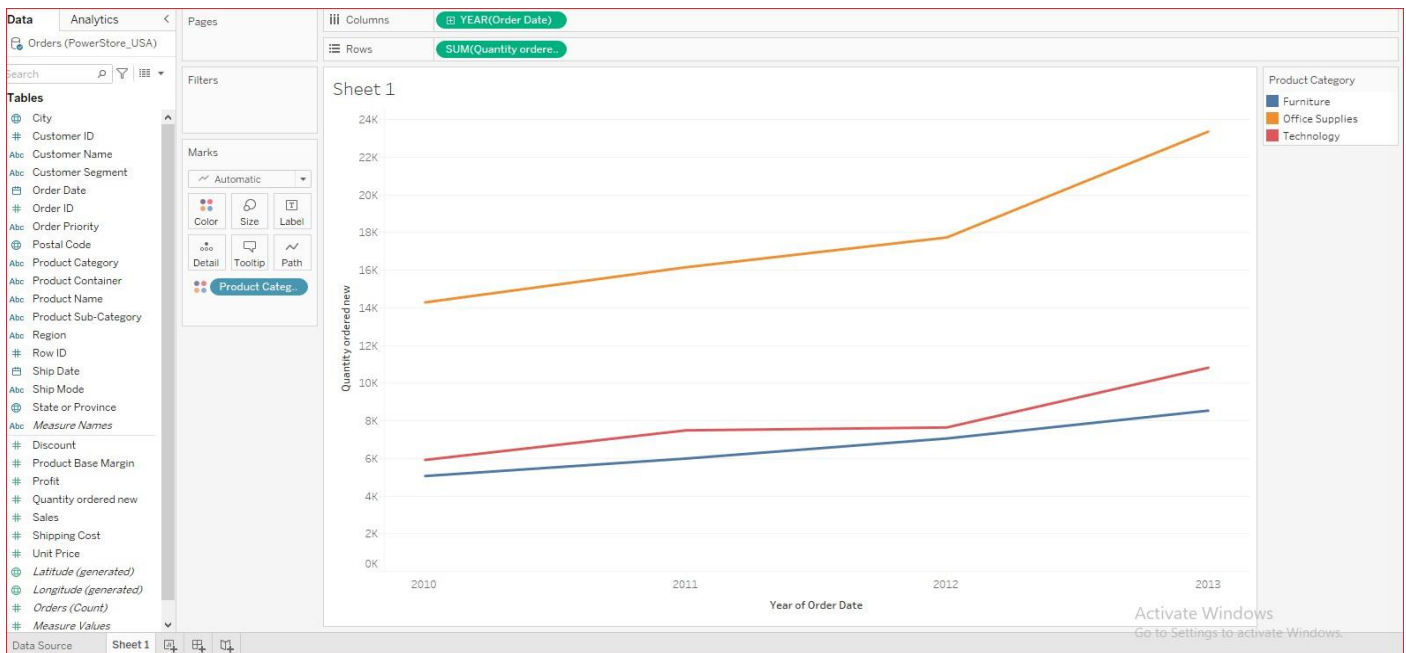
Tableau- Assignment 4

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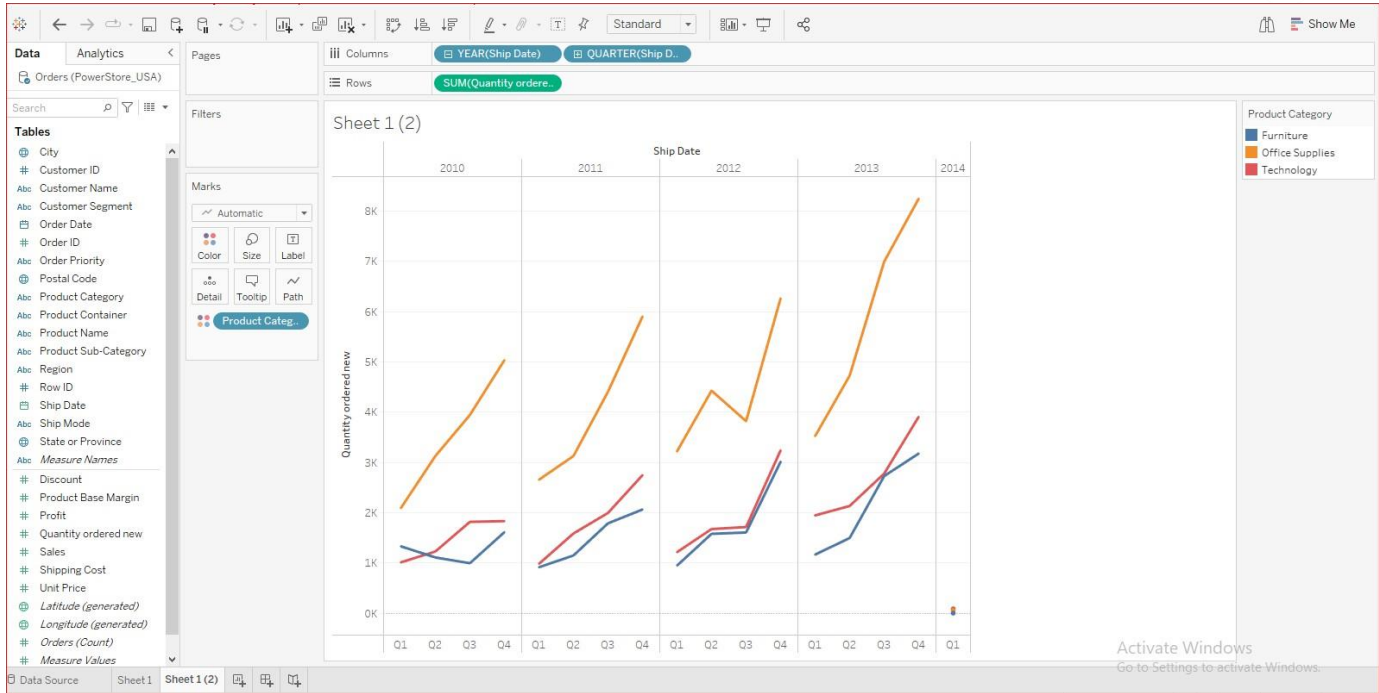
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1. Draw a comparison between discrete and continuous dates in tableau and illustrate one example for each by plotting a comparison chart using the PowerStore_USA data.

- Continuous data includes complex numbers and varying data values over a particular time interval.

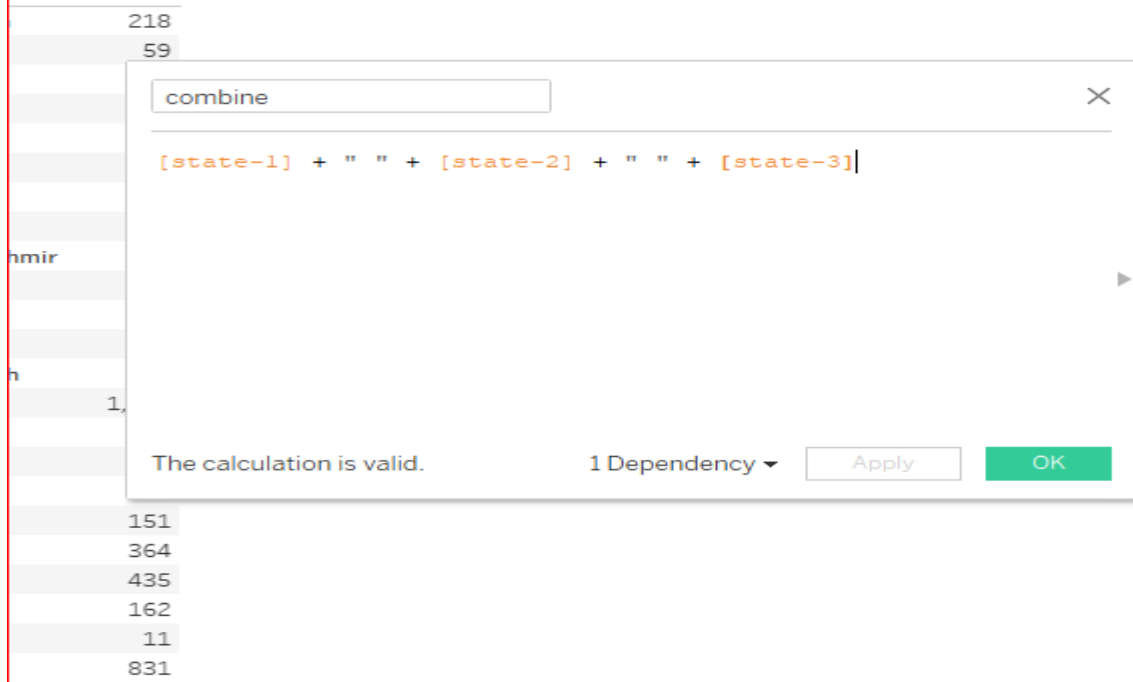


- Discrete data is a numerical type of data that includes whole, concrete numbers with specific and fixed data values determined by counting.



2. Imagine that you are given a dataset with various states of India, but the data is not cleaned properly and may have entries like “Jammu” and “Kashmir” and “Andaman” and “Nicobar Islands” separately, even though both elements are referring to the same state. Create a dummy state data with the columns (States and STD Code) with the conditions mentioned above and read the data into your tableau desktop. Using a common tableau feature, combine the elements which have been referred to twice. For example, entity “Jammu” and entity “Kashmir” should look like “Jammu Kashmir” and so on.

state-1	state-2	state-3	
Andhra	Pradesh		218
Assam			59
Bihar			228
Chandigarh			19
Chhattisgarh			155
Delhi			211
Gujarat			307
Haryana			194
Jammu	and	Kashmir	55
Jharkhand			87
Karnataka			403
Kerala			121
Madhya	Pradesh		267
Maharashtra			1,087
Manipur			18
Odisha			78
Puducherry			32
Punjab			151
Rajasthan			364
Tamil	Nadu		435
Telangana			162
Tripura			11
Uttar	Pradesh		831
Uttarakhand			70
West	Bengal		192



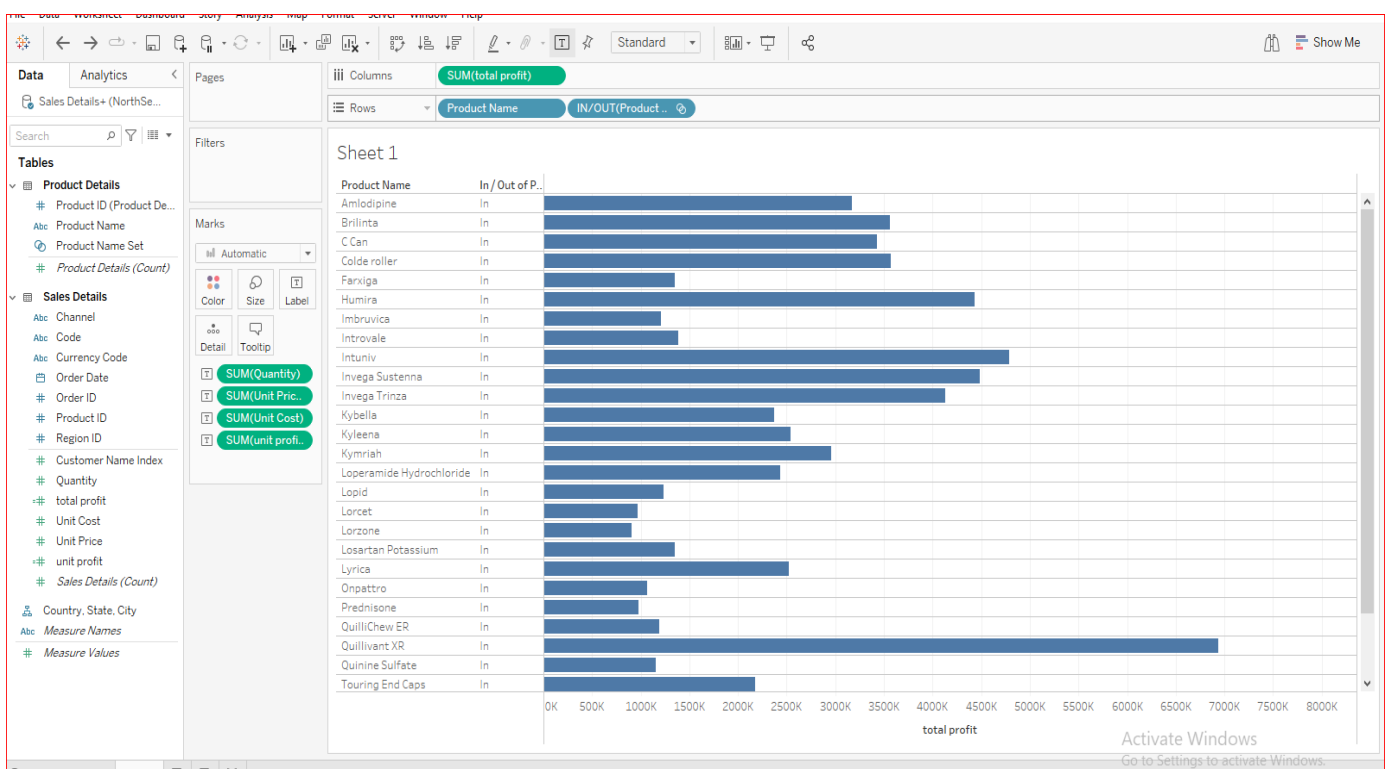
A screenshot of a Tableau worksheet. The left sidebar shows the 'Filters' and 'Marks' shelves. The 'Marks' shelf has 'SUM(Quantity)' selected. The main view displays a table titled 'combine' with two columns: the state names and their corresponding quantities.

combine	
Andhra Pradesh	218
Assam	59
Bihar	228
Chandigarh	19
Chhattisgarh	155
Delhi	211
Gujarat	307
Haryana	194
Jammu and Kashmir	55
Jharkhand	87
Karnataka	403
Kerala	121
Madhya Pradesh	267
Maharashtra	1,087
Manipur	18
Odisha	78
Puducherry	32
Punjab	151
Rajasthan	364
Tamil Nadu	435
Telangana	162
Tripura	11
Uttar Pradesh	831
Uttarakhand	70
West Bengal	192

3.A "Set" is a portion of your data that satisfies criteria based on the currently available dimensions. Using a set, you can generate a subset of data depending on certain conditions. A set can be either a constant set or a calculated set. Create a view showing IN/OUT members of the "Products with profits greater than 40000" set. Use the "NorthSeaExports.xls" dataset.

The screenshot shows the Tableau Desktop interface. On the left, the 'Data' pane displays the 'Sales Details' table with dimensions like Product ID, Product Name, Order Date, and measures like total profit. The 'Columns' shelf contains 'Product Name' and 'IN/OUT(Product Name)'. The 'Rows' shelf is empty. The 'Marks' shelf is set to 'Automatic'. The 'Edit Set' dialog box is open, showing the 'Product Name Set' configuration. The 'Condition' tab is selected, with 'total profit' chosen as the field and a condition of '> 40,000'. The 'Range of Values' section has 'Min' and 'Max' fields. The 'By formula' section is empty. The background table view shows product data with columns for Product Name, In/Out of P., and total profit.

Product Name	In / Out of P.	total profit
Amlodipine	In	1,399
Brilinta	In	396,787
C Can	In	254,356
Colde roller	In	142,432
Farxiga	In	
Humira	In	
Imbruvica	In	



←

→

↶

↷

Sales Details+ (NorthSeaExports)

Connection

Live

Extract

Filters
0 | Add

Connections

Add

NorthSeaExports

Microsoft Excel

Sheets

Customer Details

Product Details

Region

Sales Details

New Union

New Table Extension

Sales Details

13 fields 10684 rows

100 rows

#	Abc Sales Details	Abc Sales Details	Abc Sales Details	# Sales Details	# Sales Details	# Sales Details	# Sales Details	# Sales Details	# Sales Details	# Calculation	# Calculation
Customer Name Index	Channel	Currency Code	Code	Region ID	Product ID	Quantity	Unit Price	Unit Cost	unit profit	total profit	
126	Industries	Euro	INX005RT	21	27	6	2,499.10	1,824.34	674.76	4,048.54	
96	Import	Euro	INX005RT	13	20	11	2,351.70	1,269.92	1,081.78	11,899.60	
8	Industries	Euro	INX005RT	60	18	11	1,701.80	1,429.51	272.29	2,995.17	
92	Industries	Euro	INX005RT	13	25	5	1,728.60	1,019.87	708.73	3,543.63	
8	Industries	Euro	INX005RT	49	26	6	978.20	684.74	293.46	1,760.76	
42	Export	Euro	INX005RT	51	7	7	2,338.30	1,028.85	1,309.45	9,166.14	
73	Industries	Euro	INX005RT	59	8	8	2,291.40	1,260.27	1,031.13	8,249.04	
138	Export	Euro	AXT87U	18	23	11	5,219.30	4,332.02	887.28	9,760.09	
53	Industries	Euro	ZAQ890	41	1	7	2,874.30	1,667.09	1,207.21	8,450.44	
45	Industries	Euro	INX005RT	8	25	10	1,045.20	679.38	365.82	3,658.20	
50	Industries	Euro	INX005RT	15	29	5	3,999.90	3,279.92	719.98	3,599.91	
111	Industries	Euro	INX005RT	33	26	12	3,872.60	2,517.19	1,355.41	16,264.92	
37	Industries	Euro	INX005RT	38	15	6	911.20	665.18	246.02	1,476.14	
39	Import	Euro	INX005RT	43	18	12	891.10	516.84	374.26	4,491.14	
56	Export	Euro	INX005RT	44	24	6	3,879.30	2,056.03	1,823.27	10,939.63	
57	Import	Euro	INX005RT	25	19	9	1,045.20	418.08	627.12	5,644.08	
21	Industries	Euro	INX005RT	40	12	12	5,406.90	3,676.69	1,730.21	20,762.50	
141	Industries	Euro	INX005RT	49	1	6	167.50	167.50	88.75	502.50	

Data Source

Sheet1

Go to Settings to activate Windows.

4. Compare and contrast the use of Sets and Groups in Tableau. Highlight at least 2 differences each with help of illustrative examples. You can use any dataset of your choice.

- A group is a collection of related members in a field. Groups aggregate the data.
- Tableau generates a new entry in the data source as well as the dimensions section when a new group is created.

groups

Product Name (group)

Amlodipine, Brilinta, C Ca..	2,688
Imbruvica, Introvale, Intu..	3,280
Loperamide Hydrochlorid..	1,309
Other	3,407

groups

Create Group [Product Name]

Field Name: Product Name (group) A

Groups: Add to:

Amlodipine, Brilinta, C Can and 3 more

Amlodipine

Brilinta

C Can

Colde roller

Farxiga

Humira

Imbruvica

Introvale

Intuniv

Invega Sustenna

Group

Rename

Ungroup

☒ Show Add Location

☐ Include 'Other'

Find >>

Reset

OK

Cancel

Apply

Data

Analytics

Sales Details+ (NorthSe...

Search

Tables

Product Details

Product ID (Product De...

Product Name

Product Name (group)

Product Name Set

Product Details (Count)

Sales Details

Channel

Code

Currency Code

Order Date

Order ID

Product ID

Region ID

Customer Name Index

Quantity

total profit

Unit Cost

Unit Price

unit profit

Sales Details (Count)

Country, State, City

Measure Names

Measure Values

Pages

Filters

Marks

Automatic

Color

Size

Text

Detail

Tooltip

CNT(Sales Det..

Columns

Rows

Product Name (group)

groups

Product Name (group)	
Amlodipine, Brilinta, C Ca..	2,688
Imbruvica, Introvale, Intu..	3,280
Loperamide Hydrochlorid..	1,309
Onpattro	145
Prednisone	135
QuilliChew ER	166
Quillivant XR	999
Quinine Sulfate	180
Touring End Caps	301
Wal-itin	988
Westhroid	160
Winlevi	171
Xanax	162

Edit Group [Product Name (group)]

Field Name: Product Name (group)

Groups: Add to:

Amlodipine, Brilinta, C Can and 3 more

Imbruvica, Introvale, Intuniv and 5 more

Imbruvica

Introvale

Intuniv

Invega Sustenna

Invega Trinza

Kybella

Kyleena

Kymriah

Loperamide Hydrochloride, Lopid, Lorcet and 3 more

Group

Rename

Ungroup

☒ Show Add Location

☐ Include 'Other'

Find >>

Reset

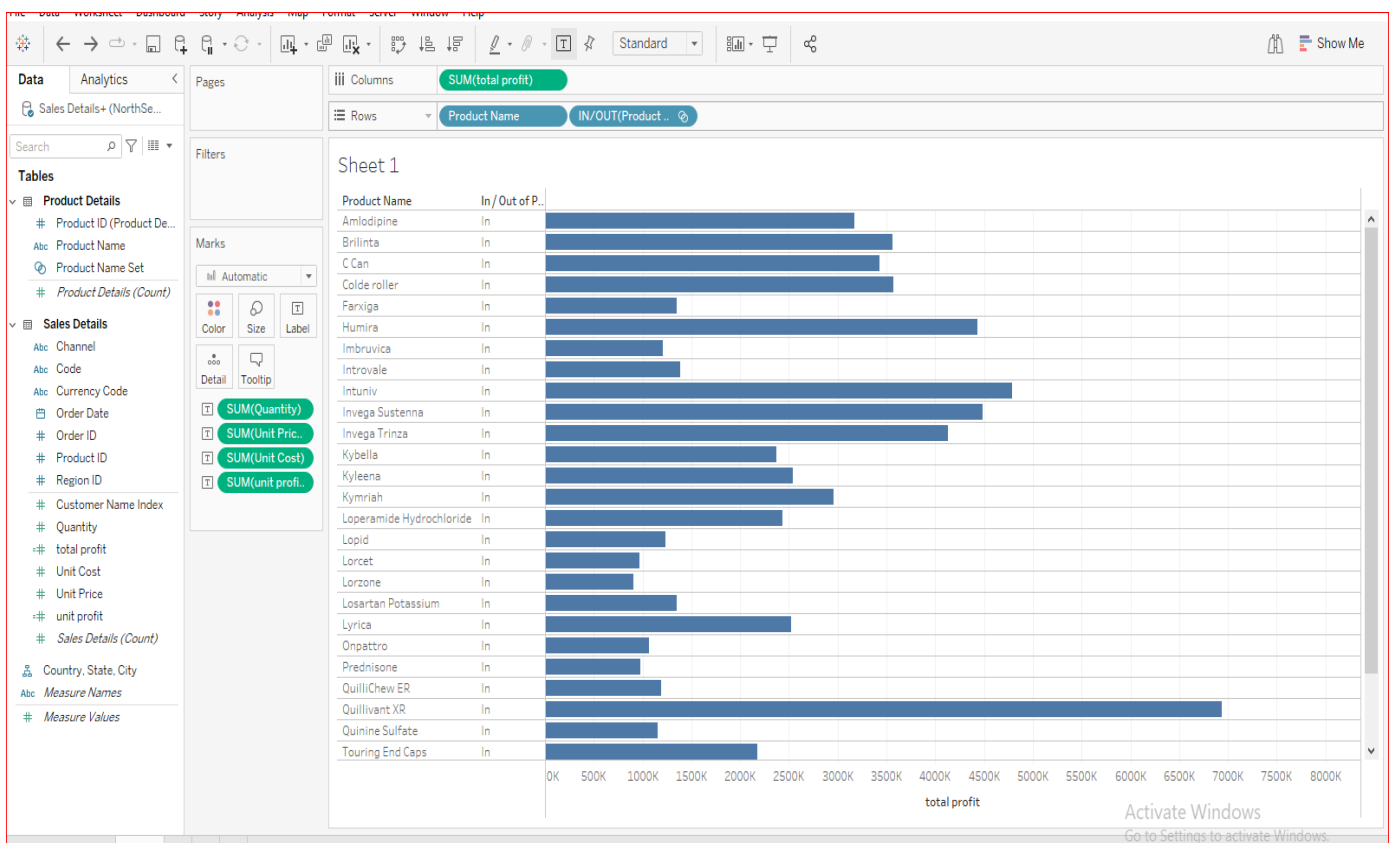
OK

Cancel

Apply

- Sets are custom fields that define a subset of data based on some conditions (IN / OUT). Sets get positioned only in the data pane under the sets section.
- Differentiate the data through IN/OUT notations without aggregating the data.

The screenshot shows the Tableau interface with a worksheet titled 'Sheet 1'. The 'Columns' shelf contains 'Product Name' and 'IN/OUT(Product Name Set)'. The 'Rows' shelf is empty. The 'Marks' shelf is set to 'Automatic'. The 'Edit Set (Product Name Set)' dialog box is open, showing the 'General' tab. The set name is 'Product Name Set'. The 'By field' option is selected, with 'total profit' chosen from the dropdown. The condition is '>' and the value is '40,000'. The 'Range of Values' section has 'Min' and 'Max' fields. The 'By formula' section is empty. The background worksheet shows a list of products with their 'In' or 'Out' status and numerical values.



5. Filters, computations, and other processes can employ parameters in place of constant values because they are dynamic variables. With reference to the above piece of information, create a view depicting the “TOP 5 States” based on their “Profit.”

- I have created the top 5 states by total profit but here only 4 states are available, so it was showing only 4 top states.

