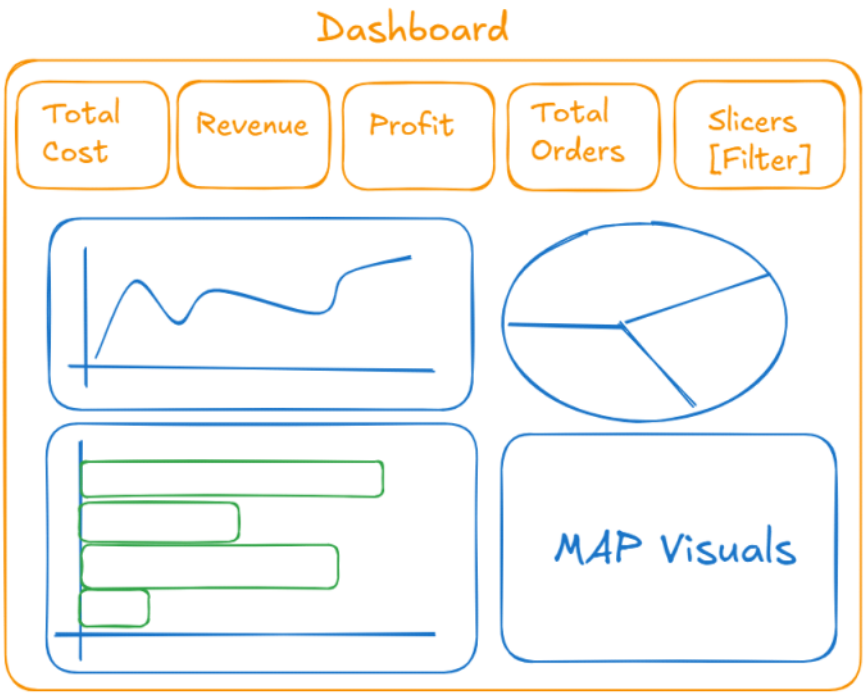
Data Analysis(Part-I)

🎯 Learning Goals:

- Learn pivot tables and their powerful data summarization capabilities.
- Explore advanced pivot table features like filters, grouping, slicers, and GETPIVOTDATA.
- Create charts and analyze data visually in Excel.
- Understand different types of charts and pivot charts in Excel
- Learn how to create dashboards using pivot tables and charts
- Get introduced to univariate analysis in data science



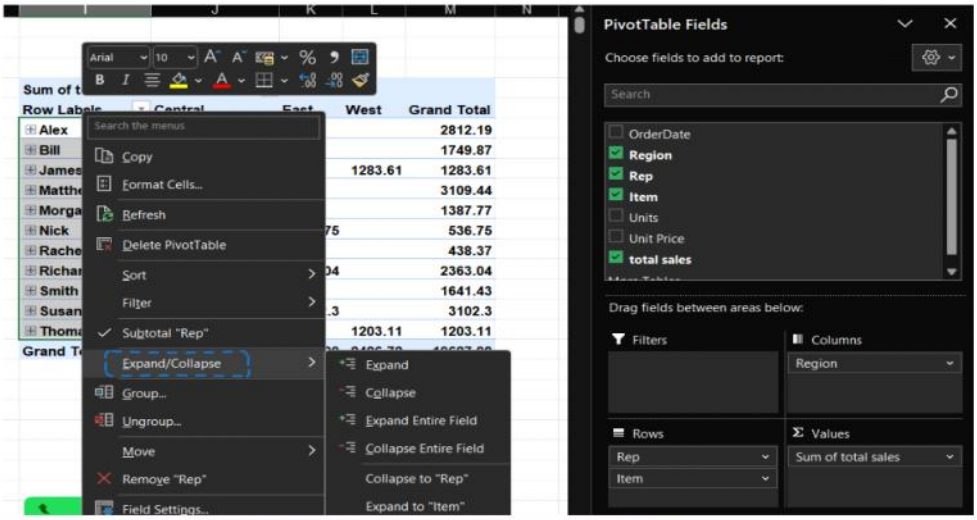
Rep	Richard

Sum of total sales	Column Labels	
Row Labels	East	Grand Total
Binder	858.76	858.76
Pen	575.36	575.36
Pen Set	565.22	565.22
Pencil	363.7	363.7
Grand Total	2363.04	2363.04

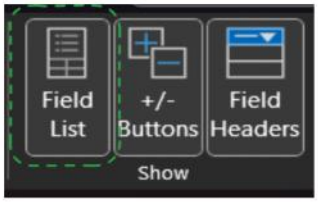
Rep	James

Sum of total sales	Column Labels	
Row Labels	West	Grand Total
Binder	139.93	139.93
Desk	825	825
Pen	151.24	151.24
Pencil	167.44	167.44
Grand Total	1283.61	1283.61

DRILL DOWN



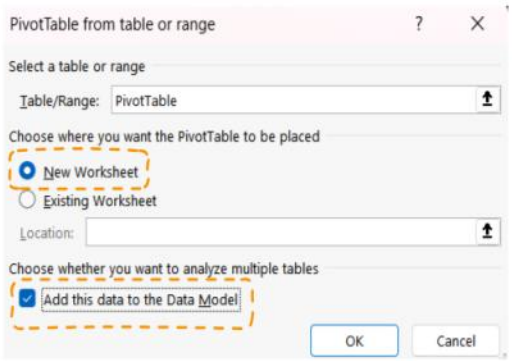
Sum of total sales	Column Labels			
Row Labels	Central	East	West	Grand Total
Alex	2812.19			2812.19
Bill	1749.87			1749.87
James			1283.61	1283.61
Matthew	3109.44			3109.44
Morgan	1387.77			1387.77
Nick		536.75		536.75
Rachel	438.37			438.37
Richard		2363.04		2363.04
Smith	1641.43			1641.43
Susan		3102.3		3102.3
Thomas			1203.11	1203.11
Grand Total	11139.07	6002.09	2486.72	19627.88

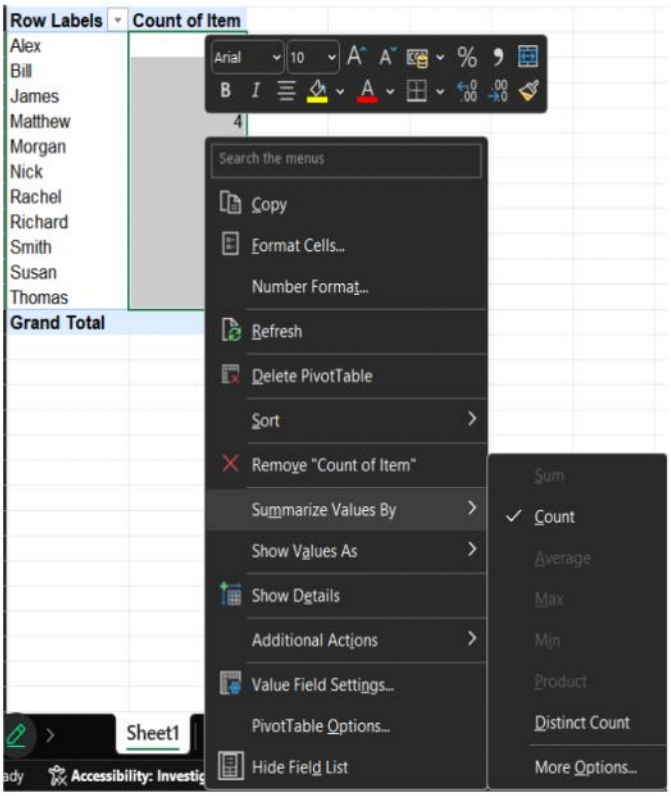


Rep	James	
Sum of total sales	Column Labels	
Row Labels	West	Grand Total
Binder	139.93	139.93
Desk	825	825
Pen	151.24	151.24
Pencil	167.44	167.44
Grand Total	1283.61	1283.61

Row Labels	Count of Item
Alex	5
Bill	5
James	4
Matthew	4
Morgan	3
Nick	2
Rachel	4
Richard	8
Smith	3
Susan	3
Thomas	2
Grand Total	43

A	B	C	D	E	F	G	H	I
Serial Number	OrderDate	Region	Rep	Item	Units	Unit Price	total sales	
1	04-Jul-14	East	Richard	Pen Set	62	4.99	309.38	
2	12-Jul-14	East	Nick	Binder	29			
3	21-Jul-14	Central	Morgan	Pen Set	55			
4	29-Jul-14	East	Susan	Binder	81			
5	07-Aug-14	Central	Matthew	Pen Set	42			
6	15-Aug-14	East	Richard	Pencil	35			
7	24-Aug-14	West	James	Desk	3			
8	01-Sep-14	Central	Smith	Desk	2	125	250	
9	10-Sep-14	Central	Bill	Pencil	7	1.29	9.03	
10	18-Sep-14	East	Richard	Pen Set	16	15.99	255.84	
11	27-Sep-14	West	James	Pen	76	1.99	151.24	
12	05-Oct-14	Central	Morgan	Binder	28	8.99	251.72	
13	14-Oct-14	West	Thomas	Binder	57	19.99	1139.43	
14	22-Oct-14	East	Richard	Pen	64	8.99	575.36	



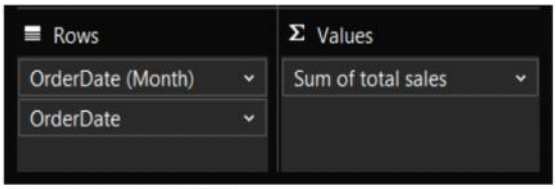


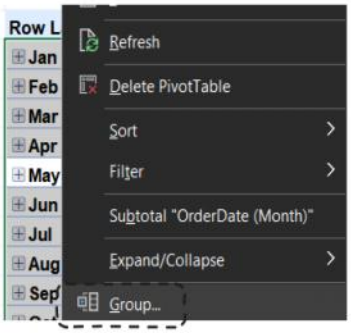
Grouping the data

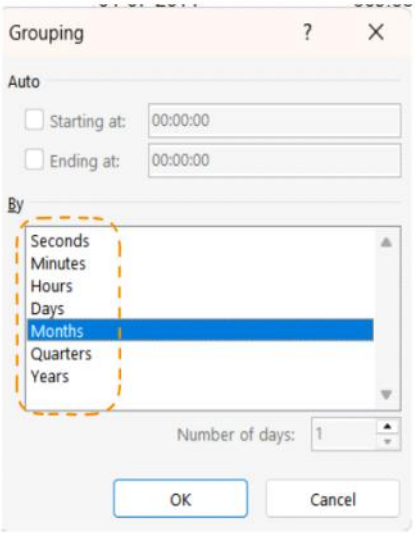
Row Labels	Sum of total sales
04-07-2014	309.38
12-07-2014	57.71
21-07-2014	686.95
29-07-2014	1619.19
07-08-2014	1005.9
15-08-2014	174.65
24-08-2014	825
01-09-2014	250
10-09-2014	9.03
18-09-2014	255.84
27-09-2014	151.24
05-10-2014	251.72
14-10-2014	1139.43
22-10-2014	575.36
31-10-2014	18.06
08-11-2014	299.85
17-11-2014	54.89
25-11-2014	479.04
04-12-2014	1879.06
12-12-2014	86.43

right click to change it to month.

Row Labels	Sum of total sales
⊞ Jan	1602.09
⊞ Feb	2044.33
⊞ Mar	556.87
⊞ Apr	1059.03
⊞ May	1300.35
⊞ Jun	1613.5
⊞ Jul	2673.23
⊞ Aug	2005.55
⊞ Sep	666.11
⊞ Oct	1984.57
⊞ Nov	833.78
⊞ Dec	3288.47
Grand Total	19627.88





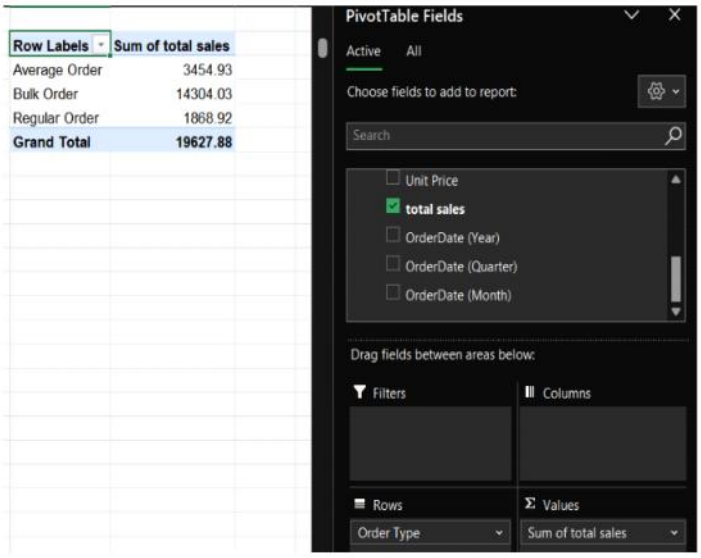


Units [Grouped based on Condition]

<10 -> Regular Order
<50 -> Average Order
>50 -> Bulk Order

Order Categories

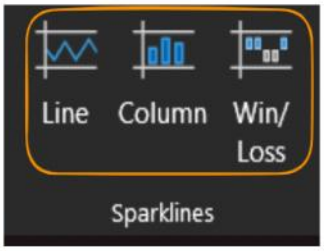
B	C	D	E	F	G
Region	Rep	Item	Year	Units	Order Type
East	Richard	Pen Set	2014	62	Bulk Order
East	Nick	Binder	2014	29	Average Order
Central	Morgan	Pen Set	2014	55	Bulk Order
East	Susan	Binder	2014	81	Bulk Order
Central	Matthew	Pen Set	2014	42	Average Order
East	Richard	Pencil	2014	35	Average Order
West	James	Desk	2014	3	Regular Order
Central	Smith	Desk	2014	2	Regular Order
Central	Bill	Pencil	2014	7	Regular Order
East	Richard	Pen Set	2014	16	Average Order

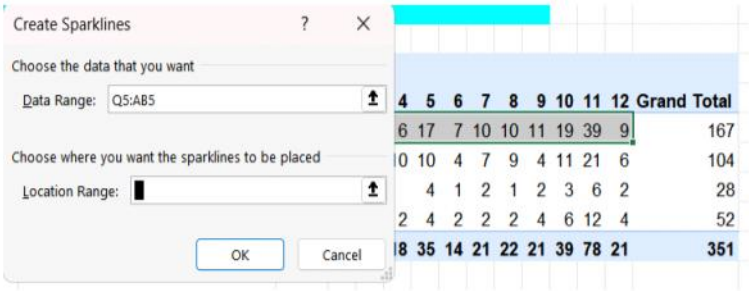



```
=IFS([@Units]<10,"Regular Order",[@Units]<50,"Average Order",[@Units]>=50,"Bulk Order")
```

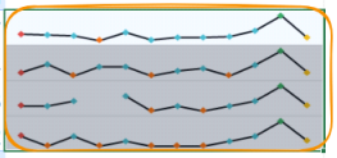
SPARKLINE

Count of QUANTITYORDERED	Col												
Row Labels	1	2	3	4	5	6	7	8	9	10	11	12	Grand Total
Classic Cars	14	13	12	6	17	7	10	10	11	19	39	9	167
Motorcycles	6	12	4	10	10	4	7	9	4	11	21	6	104
Trucks and Buses	2	2	3		4	1	2	1	2	3	6	2	28
Vintage Cars	6	2	6	2	4	2	2	2	4	6	12	4	52
Grand Total	**28**	**29**	**25**	**18**	**35**	**14**	**21**	**22**	**21**	**39**	**78**	**21**	**351**

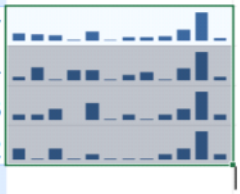


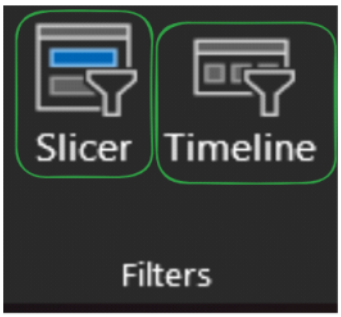


Order Qty	Orde												
ProductLine	1	2	3	4	5	6	7	8	9	10	11	12	Grand Total
Classic Cars	14	13	12	6	17	7	10	10	11	19	39	9	167
Motorcycles	6	12	4	10	10	4	7	9	4	11	21	6	104
Trucks and Buses	2	2	3		4	1	2	1	2	3	6	2	28
Vintage Cars	6	2	6	2	4	2	2	2	4	6	12	4	52
Grand Total	28	29	25	18	35	14	21	22	21	39	78	21	351



Order Qty	Order Month												
ProductLine	1	2	3	4	5	6	7	8	9	10	11	12	Grand Total
Classic Cars	14	13	12	6	17	7	10	10	11	19	39	9	167
Motorcycles	6	12	4	10	10	4	7	9	4	11	21	6	104
Trucks and Buses	2	2	3		4	1	2	1	2	3	6	2	28
Vintage Cars	6	2	6	2	4	2	2	2	4	6	12	4	52
Grand Total	28	29	25	18	35	14	21	22	21	39	78	21	351





Sum of total sa	Column Lab			
Row Labels	Central	East	West	Grand Total
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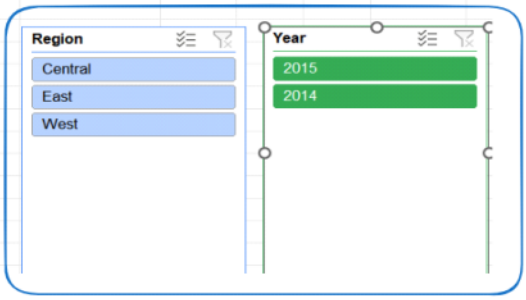
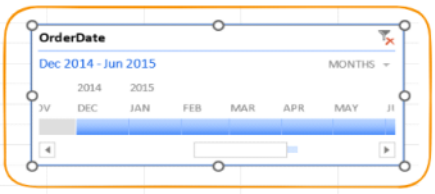
Susan		3102.3		3102.3
Thomas			1203.11	1203.11
Grand Total	11139.07	6002.09	2486.72	19627.88

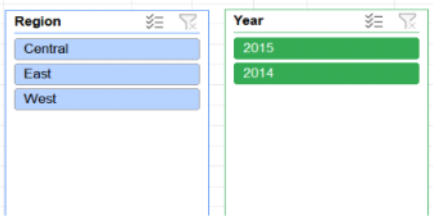
Row Labels	Count of Item
Alex	5
Bill	5

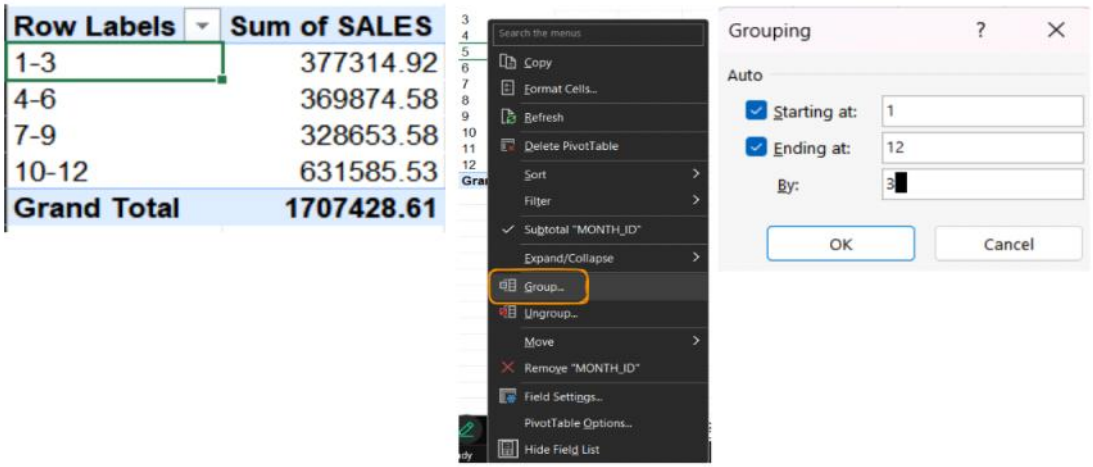
Sum of total sales				
Row Labels	Central	East	West	Grand Total
Binder	5762.63	2535.66	1279.36	9577.65
Desk	875		825	1700
Pen	539.73	1354.25	151.24	2045.22
Pen Set	2421.39	1748.48		4169.87
Pencil	1540.32	363.7	231.12	2135.14
Grand Total	11139.07	6002.09	2486.72	19627.88

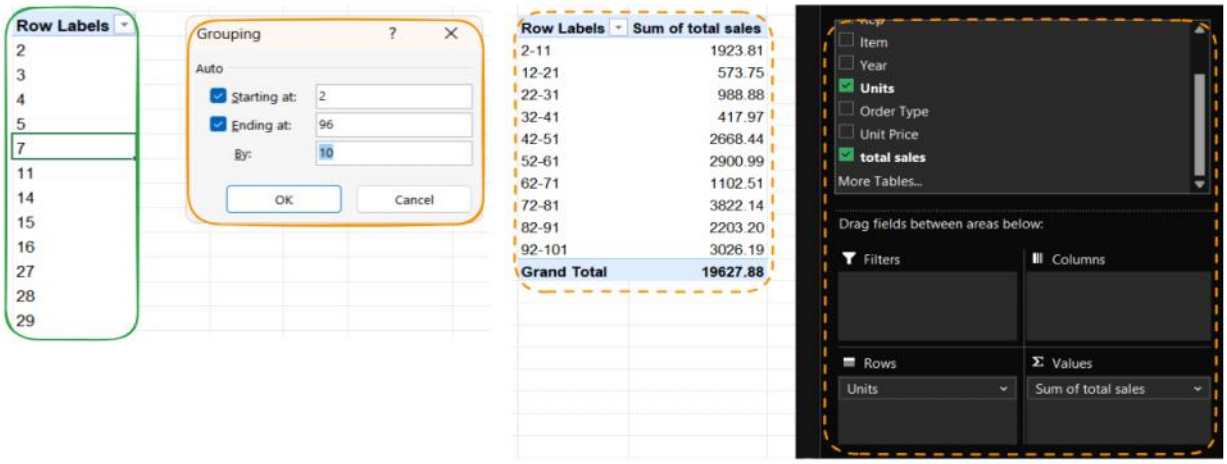


Sum of total sales				
Row Labels	Central	East	West	Grand Total
Binder	5456.02	858.76	139.93	6454.71
Desk	625			625
Pen	539.73	479.04		1018.77
Pen Set	249.5	1183.26		1432.76
Pencil	1513.23	189.05	231.12	1933.4
Grand Total	8383.48	2710.11	371.05	11464.64

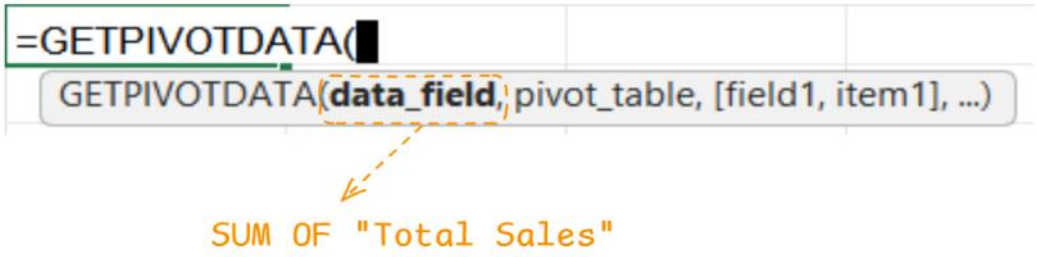


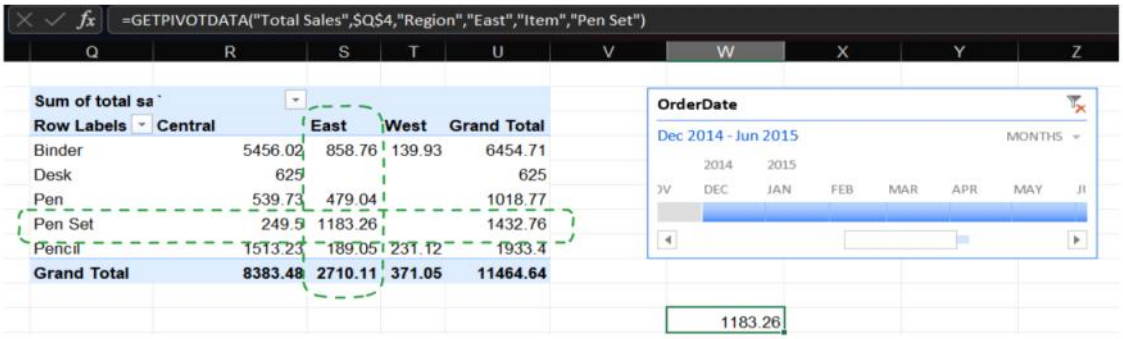






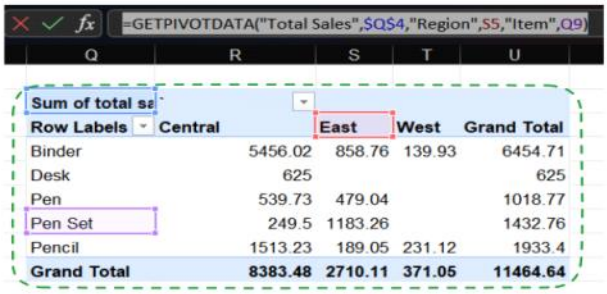
GETPIVOTDATA()

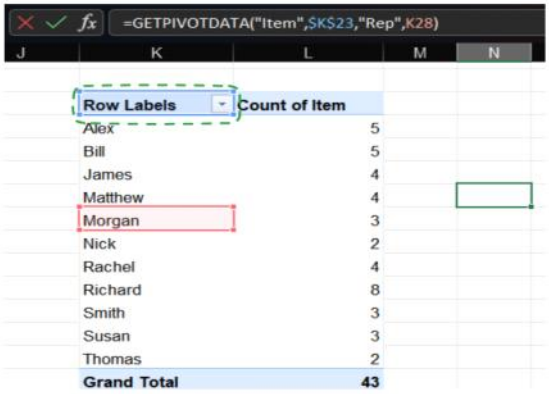




=GETPIVOTDATA("Total Sales",Q4,"Region","East","Item","Pen Set")

=GETPIVOTDATA("Total Sales",Q4,"Region",S5,"Item",Q9)



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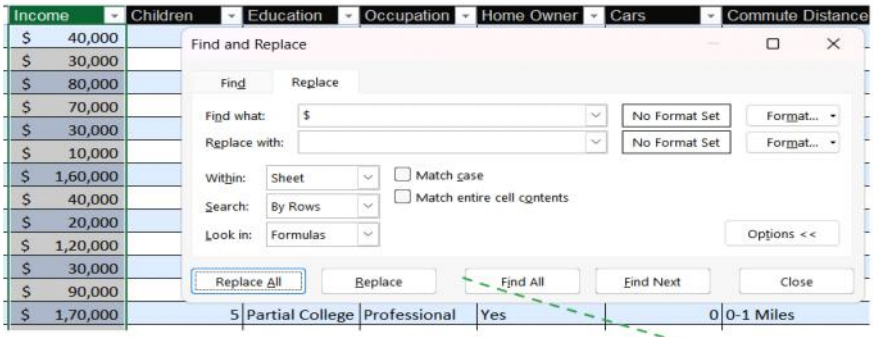
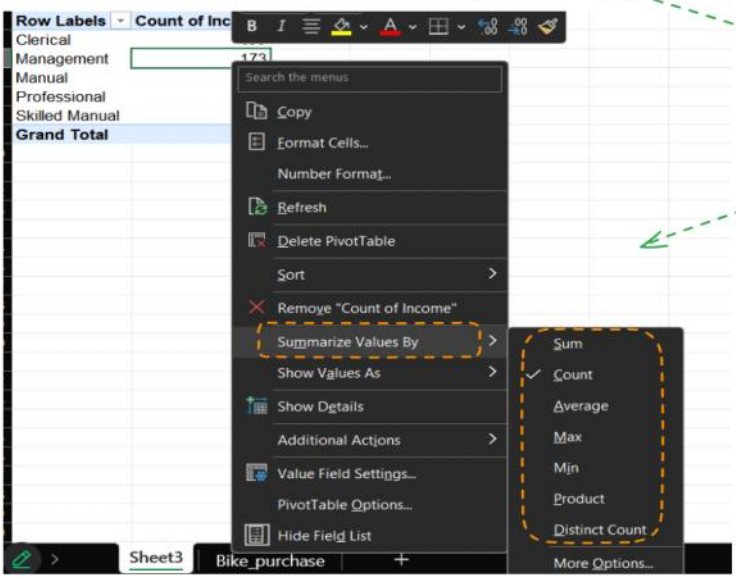
=GETPIVOTDATA("Item",$K$23,"Rep",K28)
```

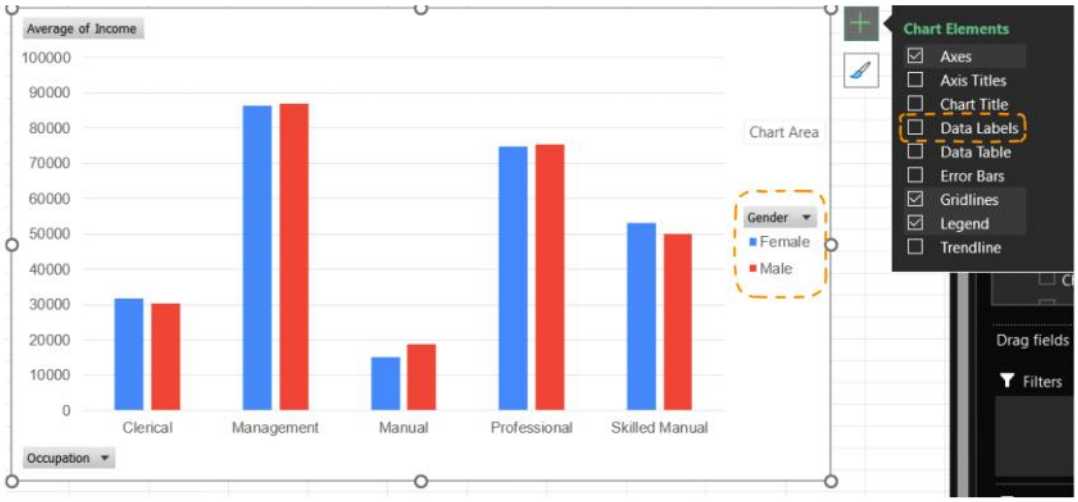
PIVOT CHARTS....

session_11.dataset





Refresh the data



Row Labels	Female	Male	Grand Total
Clerical	31684	30366	31073
Management	86410	86842	86647
Manual	15147	18824	16723
Professional	74762	75333	75072
Skilled Manual	53197	50150	51608
Grand Total	**54581**	**58063**	**56360**