A

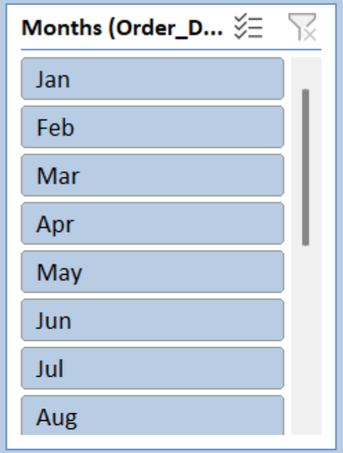
PR. 2 Analyzer

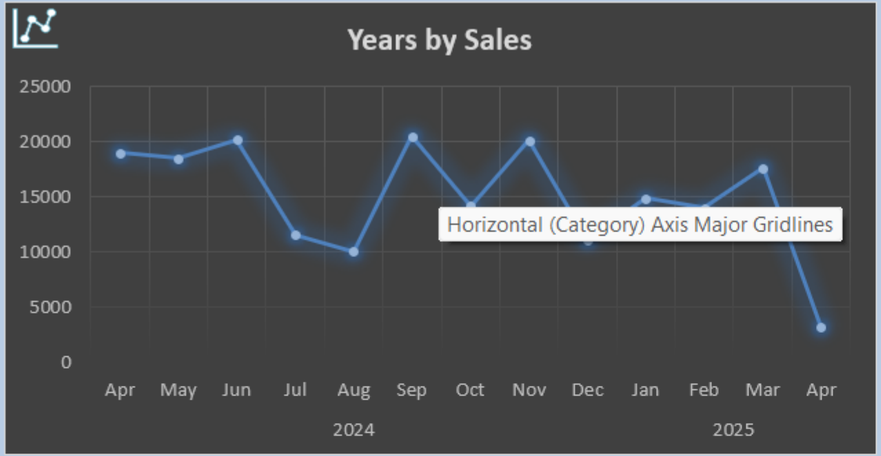
Topics:

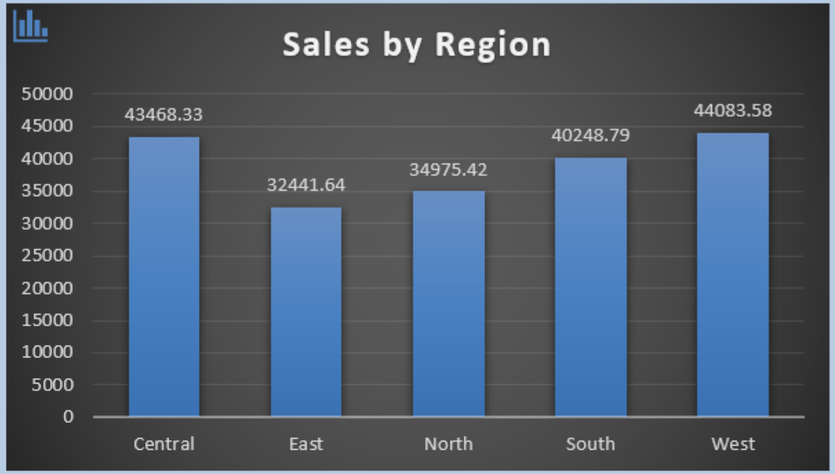
- Conditional Formatting
- WHAT IF Analysis
- Linear Regression (Using Data Analysis Toolpak)
- Data Analysis Feature (Descriptive Stats, Regression, Histogram)
- Data Storytelling
- Add Symbols or Arrows in Custom Formatting
- Create Timestamp
- Find High-Value Customers using Groupby(), index(), and match() combination
- Advanced Descriptive Analytics
- Pivot Table with Dashboard
- Creating bar charts
- Creating line charts
- Creating pie charts

Main Tasks:

1. Apply conditional formatting to highlight top 10 customers based on total purchase.
2. Perform WHAT IF Analysis to see impact of changing discount on total profit.
3. Use Data Analysis Toolpak to run Linear Regression (Profit vs Sales).
4. Use 'Descriptive Statistics' from Analysis Toolpak on the dataset.
5. Add up/down arrows on monthly sales growth.
6. Create a timestamp column using NOW().
7. Identify high-value customers using index(), match(), and filters.
8. Create Pivot Table to analyze total sales by region and product.
9. Create bar, line, and pie charts to visualize KPIs.
10. Summarize insights using a dashboard.

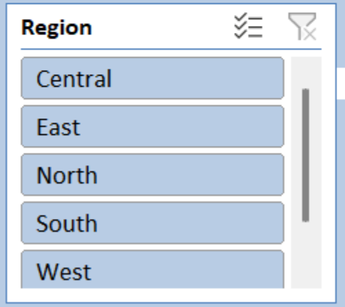


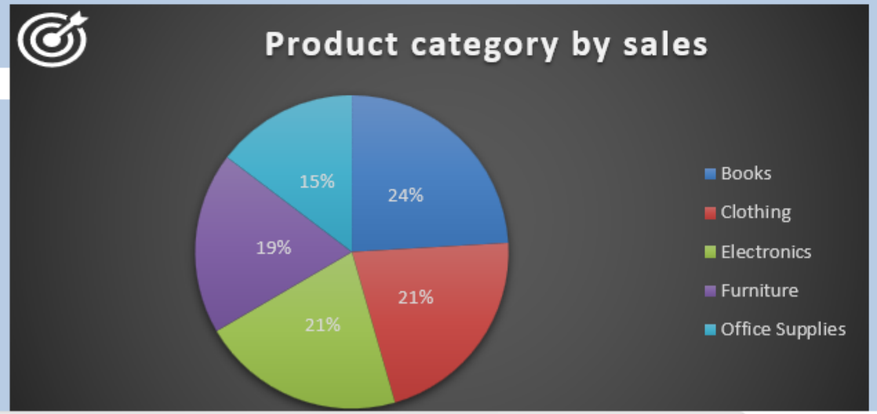


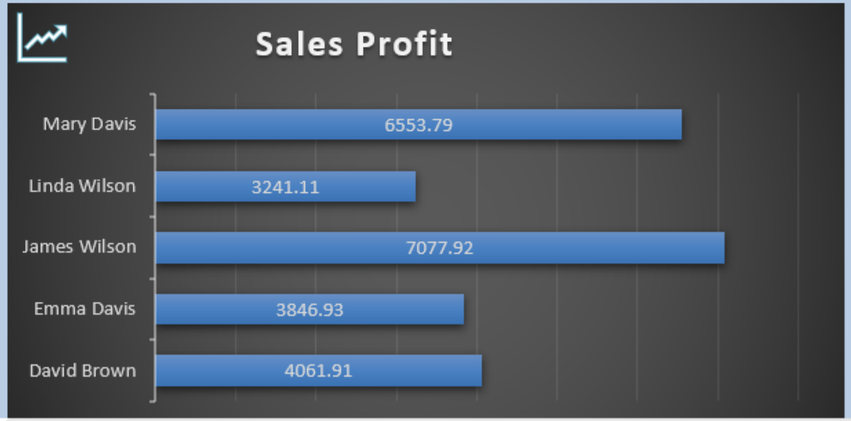


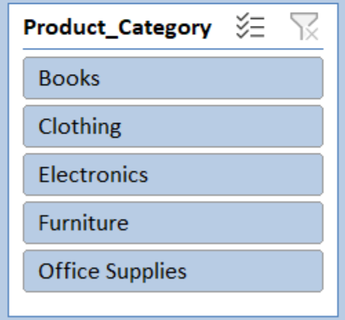
₹	24,781.66

$ 1,95,217.76

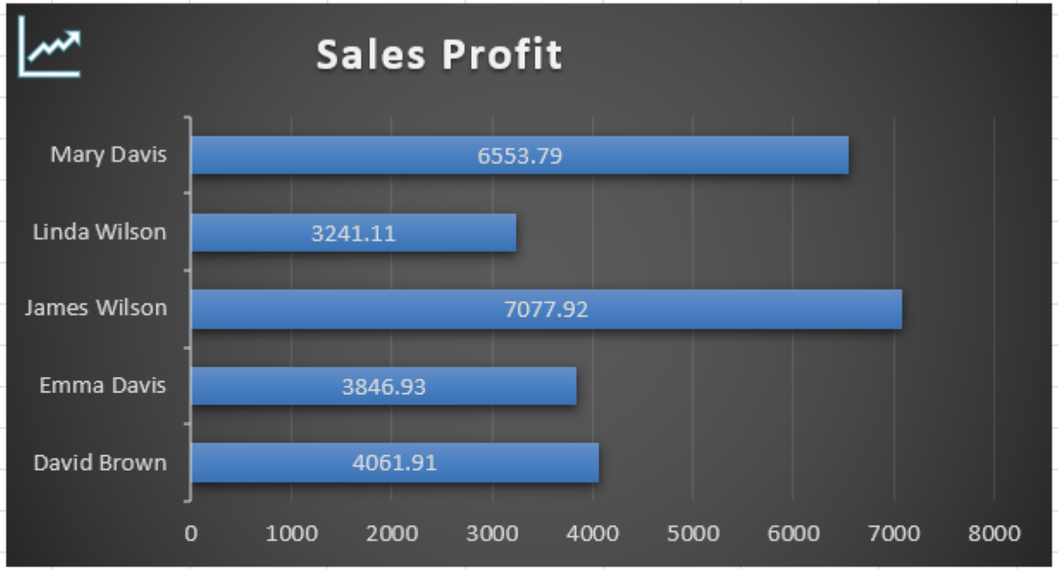








Row Labels	Sum of Profit
David Brown	4061.91
Emma Davis	3846.93
James Wilson	7077.92
Linda Wilson	3241.11
Mary Davis	6553.79
Grand Total	**24781.66**



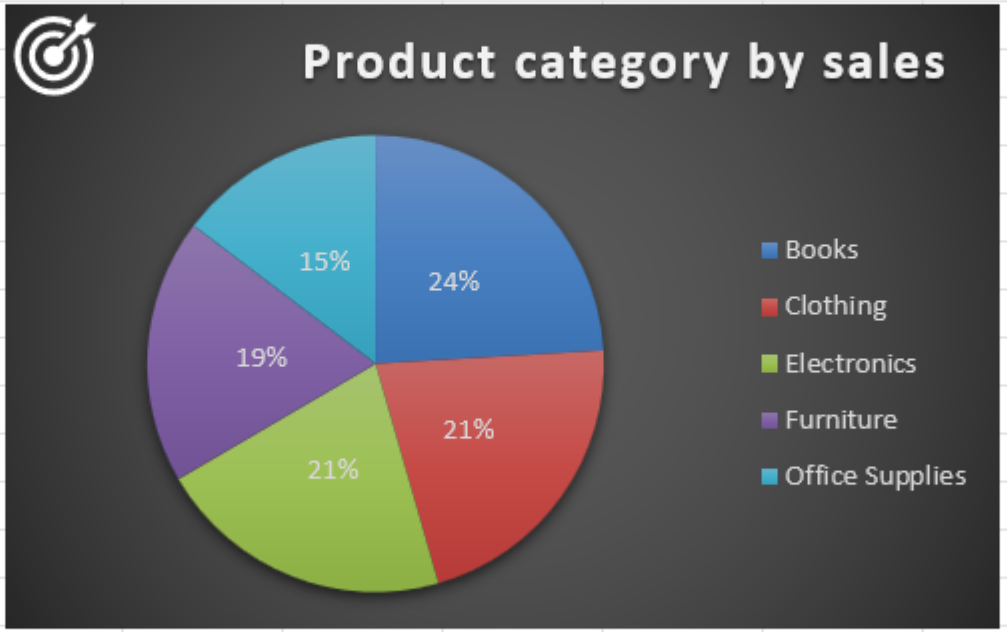
$24,781.66

Format Painter

Clipboard | Font | Alignment | Number | Styles

Books

Row Labels	Sum of Sales
Books	47002.46
Clothing	41927.59
Electronics	41044
Furniture	36612.89
Office Supplies	28630.82
Grand Total	**195217.76**



Product_Category

- Books
- Clothing
- Electronics
- Furniture
- Office Supplies

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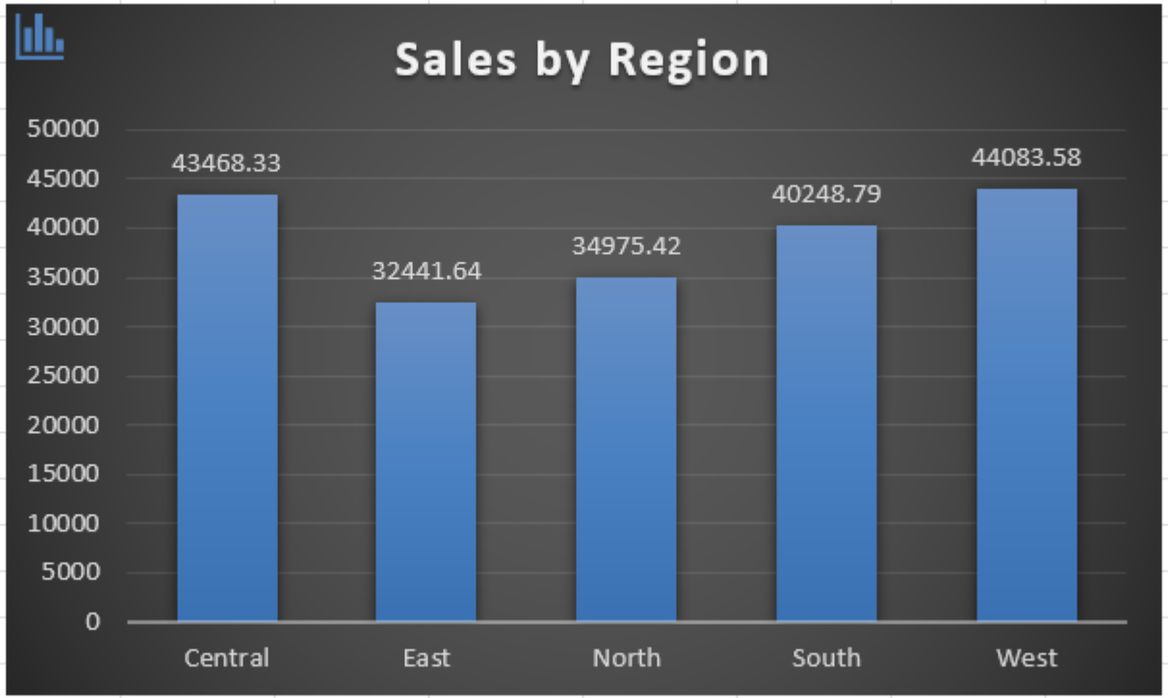
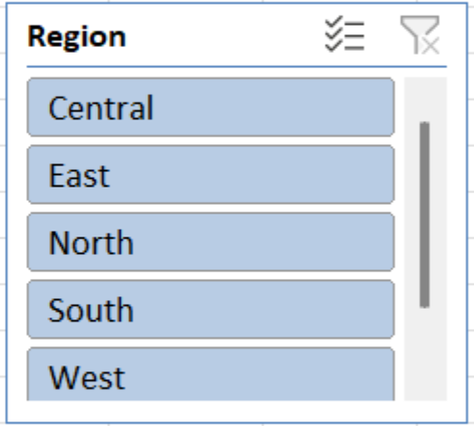
A4 | Central

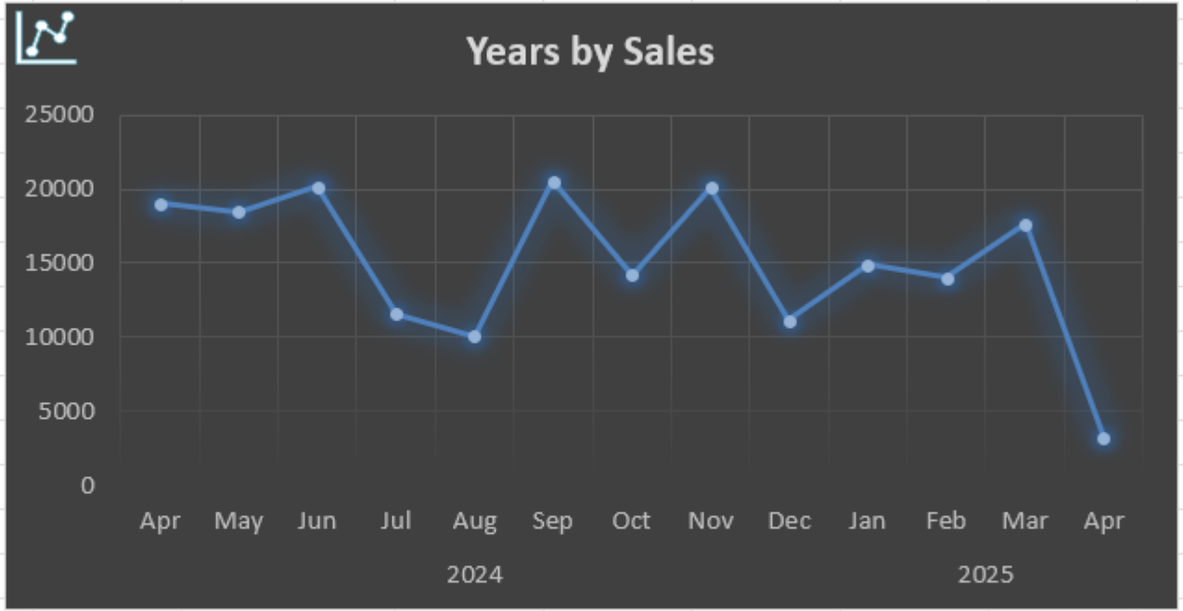
Row Labels	Sum of Sales
Central	43468.33
East	32441.64
North	34975.42
South	40248.79
West	44083.58
Grand Total	**195217.76**





19 | =GETPIVOTDATA("Sales",A3)

Row Labels	Sum of Sales
2024	145429.36
Apr	19029.96
May	18507.34
Jun	20187.51
Jul	11609.04
Aug	10091.7
Sep	20533.5
Oct	14215.24
Nov	20135.03
Dec	11120.04
2025	49788.4
Jan	14914.65
Feb	14006.36
Mar	17655.22
Apr	3212.17
Grand Total	195217.76



Months (Order_D...

- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug

₹ 1,95,217.76

A	B	C
Sales		
Mean	976.0888	
Standard Error	21.16185045	
Median	976.72	
Mode	#N/A	
Standard Deviation	299.2737591	
Sample Variance	89564.78288	
Kurtosis	-0.088595232	
Skewness	0.146857966	
Range	1665.15	
Minimum	258.51	
Maximum	1923.66	
Sum	195217.76	
Count	200	
Largest(2)	1681.21	
Smallest(2)	309.42	

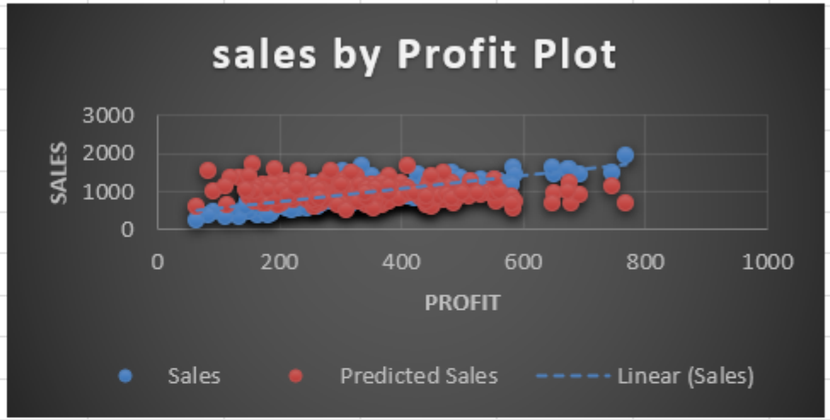
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.773403064
R Square	0.5981523
Adjusted R Square	0.596122766
Standard Error	190.192473
Observations	200

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	10661102.79	10661103	294.724	4.62694E-41
Residual	198	7162289.005	36173.18		
Total	199	17823391.79			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*Upper 95.0%*
Intercept	393.9976652	36.47626798	10.80148	1.11E-21	322.0658272	465.9295	322.0658	465.9295032
Profit	1.704837083	0.099305921	17.16753	4.63E-41	1.509004072	1.90067	1.509004	1.900670095



Customer_ID	Customer_Name	Region	Product_Category	Sales	Quantity	Discount	Order_Date	Profit	Total parchase	Time
CUST004	Sarah Davis	West	Office Supplies	1443.98	19	0	2024-09-12	649.79	27435.62	07-01-2026 13:13
CUST007	David Brown	West	Clothing	1493.49	18	0	2025-03-18	746.74	26882.82	07-01-2026 13:13
CUST030	Mary Davis	East	Clothing	1291.47	18	0.1	2024-08-22	581.16	23246.46	07-01-2026 13:13
CUST012	Mary Wilson	West	Clothing	1360.36	17	0	2024-06-30	680.18	23126.12	07-01-2026 13:13
CUST004	James Taylor	Central	Clothing	1277.85	18	0.2	2024-11-17	511.14	23001.3	07-01-2026 13:13
CUST001	Michael Anderson	Central	Furniture	1432.47	16	0.15	2024-12-14	426.16	22919.52	07-01-2026 13:13
CUST003	James Davis	South	Electronics	1335.87	17	0	2024-09-09	333.97	22709.79	07-01-2026 13:13
CUST021	Michael Anderson	East	Furniture	1186.85	19	0.2	2024-06-08	332.32	22550.15	07-01-2026 13:13
CUST013	Mary Wilson	North	Clothing	1171.18	19	0.05	2025-01-10	556.31	22252.42	07-01-2026 13:13
CUST026	Sarah Anderson	West	Electronics	1161.67	19	0.2	2024-12-21	232.33	22071.73	07-01-2026 13:13
CUST003	James Wilson	West	Electronics	1158.94	19	0.2	2024-09-18	231.79	22019.86	07-01-2026 13:13
CUST002	Linda Brown	East	Electronics	1410.59	15	0	2024-11-19	352.65	21158.85	07-01-2026 13:13
CUST010	Linda Brown	South	Electronics	1173.12	18	0	2024-05-06	293.28	21116.16	07-01-2026 13:13
CUST005	Sarah Anderson	South	Electronics	1502.93	14	0.2	2024-04-28	300.59	21041.02	07-01-2026 13:13
CUST008	James Wilson	East	Books	1081.14	19	0.15	2024-10-12	367.59	20541.66	07-01-2026 13:13
CUST018	David Anderson	Central	Clothing	1456.94	14	0.05	2025-03-29	692.05	20397.16	07-01-2026 13:13
CUST022	Linda Brown	South	Books	1264.49	16	0.05	2024-09-14	480.51	20231.84	07-01-2026 13:13
CUST024	Emma Davis	West	Electronics	1526.6	13	0.2	2024-08-08	305.32	19845.8	07-01-2026 13:13
CUST006	Mary Jackson	West	Books	1506.14	13	0.2	2024-04-30	481.96	19579.82	07-01-2026 13:13
CUST024	Linda Taylor	North	Clothing	1622.62	12	0.2	2025-01-20	649.05	19471.44	07-01-2026 13:13
CUST020	Linda Jackson	East	Furniture	1143.69	17	0	2024-08-30	400.29	19442.73	07-01-2026 13:13
CUST002	Mary Jackson	Central	Office Supplies	1618.22	12	0.2	2025-02-24	582.56	19418.64	07-01-2026 13:13
CUST014	Emma Davis	South	Books	1064.19	18	0.05	2025-03-09	404.39	19155.42	07-01-2026 13:13
CUST022	James Wilson	West	Books	1353.79	14	0.1	2024-12-30	487.36	18953.06	07-01-2026 13:13
CUST014	David Thomas	Central	Books	1343.13	14	0.15	2024-04-22	456.66	18803.82	07-01-2026 13:13
CUST028	Linda Taylor	East	Office Supplies	983.34	19	0.1	2024-05-14	398.25	18683.46	07-01-2026 13:13

Conditional fornatting		
Month	Total_Sales	Sales_Growth
2024-04	19030	-
2024-05	18507.3	-2.747%
2024-06	20187.5	9.079%
2024-07	11609	-42.494%
2024-08	10091.7	-13.070%
2024-09	20533.5	103.469%
2024-10	14215.2	-30.771%
2024-11	20135	41.644%
2024-12	11120	-44.773%
2025-01	14914.6	34.124%
2025-02	14006.4	-6.089%
2025-03	17655.2	26.051%
2025-04	3212.17	-81.806%

Total parchase
29646656.85
18226804.86
26629982.72
18490732.75
22250908.16
20734190.64
18090904.5

No	Total parches	
1	27435.6	Customer_
2	26882.8	Sarah Davis
3	23246.5	David Brow
4	23126.1	Mary Davis
5	23001.3	Mary Wilso
6	22919.5	James Tayl
7	22709.8	Michael An
8	22550.2	James Davi
9	22252.4	Michael An
10	22071.7	Mary Wilso