Task 2

README

Deliverables included
- `superstore_synthetic.csv` : Synthetic sales dataset used for visualizations.
- `images/` : All chart PNGs used in the report.
- `analysis_script.py` : Python script that generates dataset and charts.
- `report.pdf` : Combined professional report with visuals and narrative.
- `README.md` : This file.
- `presentation_notes.md` : Slide-style storyboard and insights for storytelling.

Presentation Notes

Presentation Storyboard / Insights (short)

1. One-line summary: Sales show monthly patterns; Technology drives revenue with variable margins.

2. Monthly trend: Highlight peak months indicating seasonality and promotion windows.

3. Category comparison: Office Supplies provides steady revenue; Technology has higher ticket sizes.

4. Regional focus: Targeted campaigns in top states to maximize conversions.

5. Recommendations: Promote high-margin items; review discounting strategy in low-margin segments.

Dataset Sample (First 10 Rows)

| r_date	ship_date	customer_name	region	state	category	subcategory	quantity	unit_price	sales
-07-07	2018-07-12	Customer 1178	South	Illinois	Office Supplies	Paper	1	183.05	183.05
-10-23	2021-11-01	Customer 2546	West	Pennsylvania	Office Supplies	Labels	1	627.87	627.87
-04-03	2023-04-10	Customer 715	South	Florida	Office Supplies	Labels	1	240.6	240.6
-10-11	2018-10-18	Customer 3611	West	Pennsylvania	Office Supplies	Labels	3	641.05	1923.15
-12-18	2018-12-26	Customer 3417	South	Texas	Technology	Phones	1	380.63	380.63
-02-24	2019-03-01	Customer 2346	South	Illinois	Technology	Copiers	3	1280.78	3842.34
-03-20	2019-03-28	Customer 2935	East	Illinois	Furniture	Tables	1	620.63	620.63
-06-01	2021-06-10	Customer 2632	West	Texas	Office Supplies	Paper	1	670.18	670.18
-06-04	2022-06-06	Customer 146	Central	California	Technology	Copiers	1	459.74	459.74
-04-18	2018-04-21	Customer 662	West	Illinois	Technology	Accessories	1	1930.39	1930.39

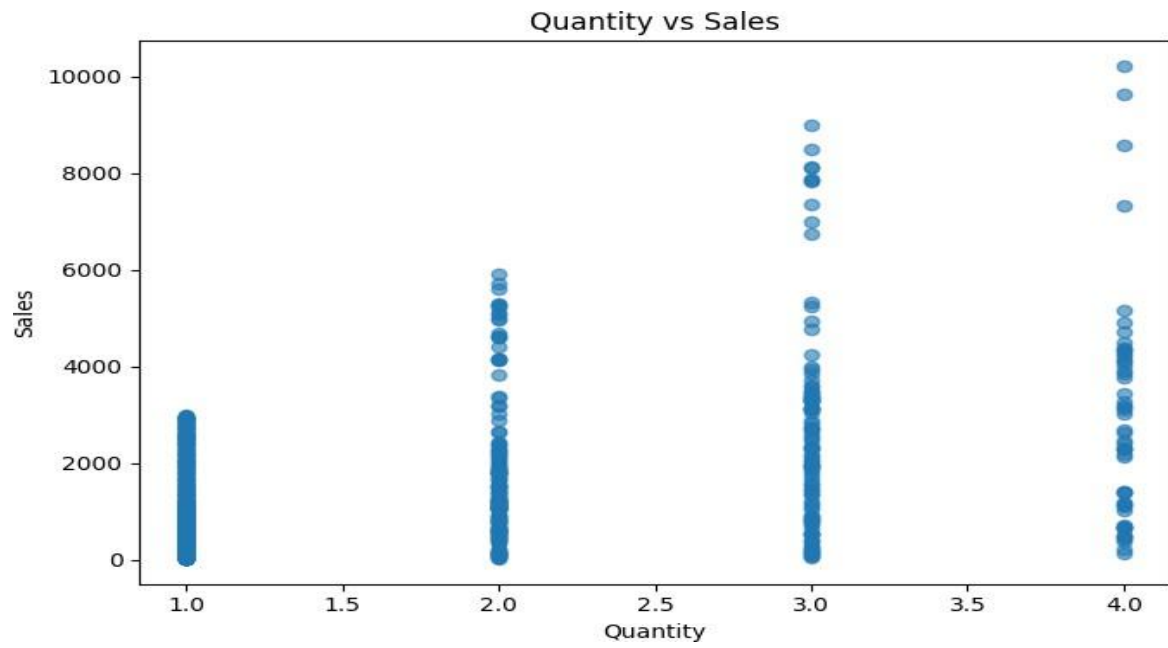**Visualizations**

Monthly Sales Trend
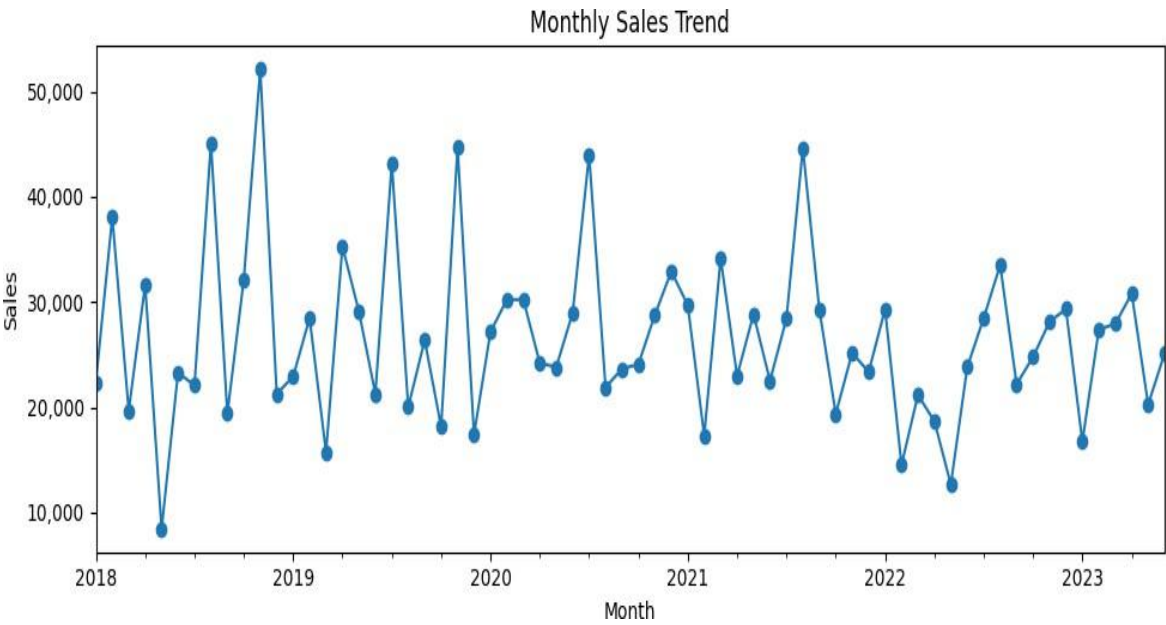
Sales By Category
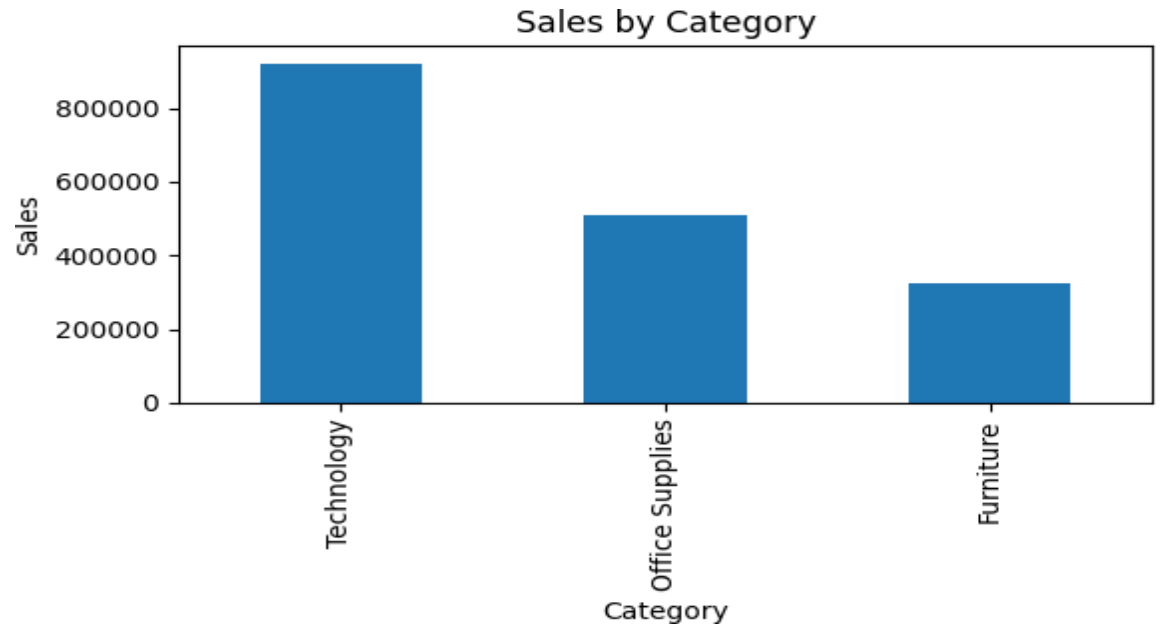
Top States Sales
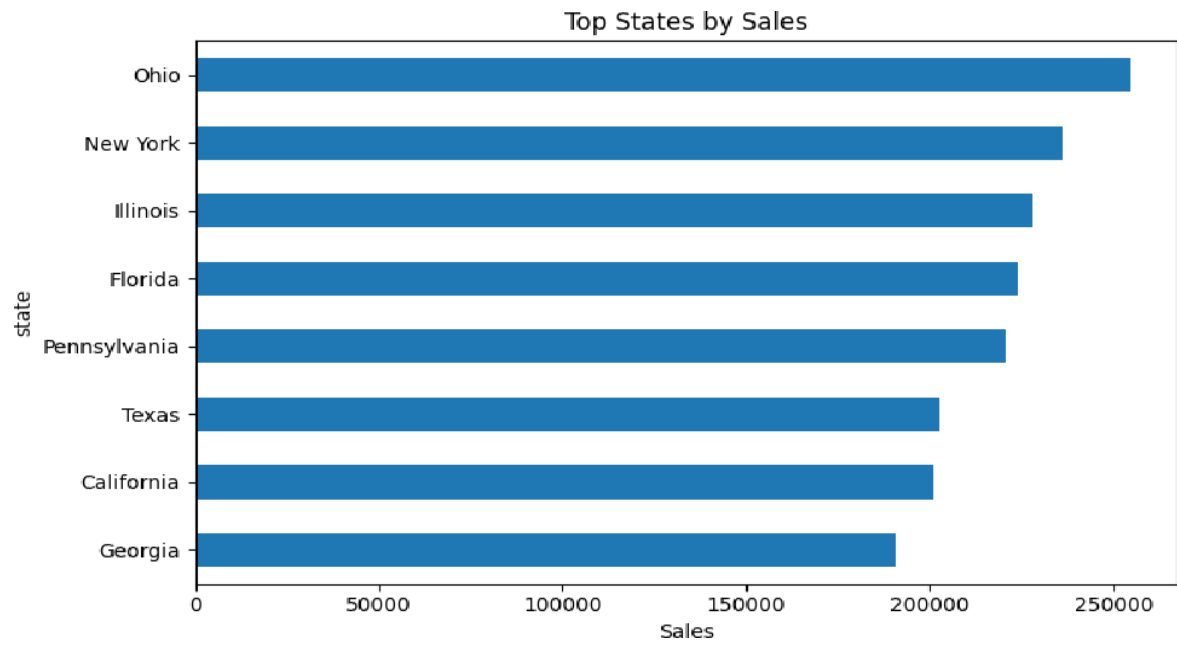
Margin By Category
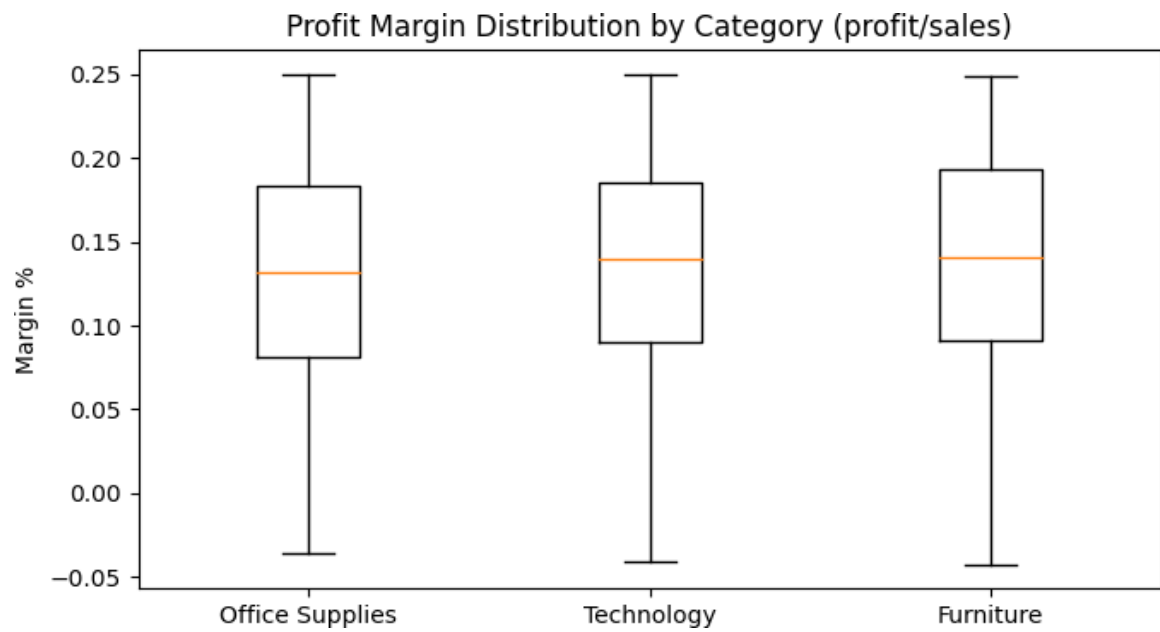
Quantity Vs Sales

Quantity vs Sales

Top Subcategories

Top Subcategories by Sales