Project Title: **Mobile and Laptop Sales**

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Data Source: Kaggle Mobile and Laptop sales dataset

**Objective:**  
The project analyzes mobile and laptop sales to extract insights on sales performance, product trends, and customer behavior. The goal is to help in decision-making for inventory management, marketing strategies, and business growth.

**Scope:**

* Analysis of mobile phones and laptops sold.
* Focus on product specifications, sales quantity, and customer locations.
* Identify trends in product sales in region.

**Data collection:**

**Fields**: Product, Brands, Product code, Region, Product Specification, inward Date, Dispatch Date, Quantity sold, Customer name, Customer Location, Core Specification, Processor Specification, RAM, ROM and SSD.

**Data Cleaning:**

* Ensure Inward Date and Dispatch Date are in proper date format.
* Handle missing in column of RAM, ROM and SSD.
* Check duplicate entries for Product Code if any.
* Standardize units for RAM, ROM, and SSD.
* Calculate Total Sale Amount as Price × Quantity Sold.

**Exploratory Data Analysis (EDA):**

**Sales Trend Analysis:**

* Year sales trends for mobiles vs laptops.

**Top-selling Products:**

* Identify products generating highest revenue or most units sold.

**Category-wise Performance:**

* Compare performance between mobile phones and laptops.

**Visualization Suggestions:**

* Line chart: Sales over time.
* Bar chart: Quantity sold per Brand.
* Pie chart: Regional sales distribution.

**Key Metrics and KPIs:**

* Total Revenue per Product and Brand
* Average Price per Product Type
* Total Quantity Sold
* Total Revenue by Region and Product

**Insights and Recommendations:**

* Highlight best-selling brands and models.
* Identify slow-moving products for stock optimization.
* Recommend marketing campaigns targeting high-potential regions.
* Suggest hardware configurations in demand based on customer preferences.

**Tools and Technologies:**

* Python (pandas, NumPy, matplotlib, seaborn) for analysis
* Excel for quick reporting
* Power BI for dashboards

**Future Enhancements:**

* Predictive analysis for future sales using machine learning
* Customer segmentation for personalized offers
* Real-time sales monitoring dashboard

**Conclusion:**

The analysis provides insights on sales trends, product performance, and customer preferences. It supports decision-making for inventory management, marketing, and product strategy.