DOCUMENTATION REPORT ON SALES ANALYSIS AND VISUALIZATION IN DIFFERENT STATES OF U.S.A

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Introduction about Sales Report:

Sales analysis is the process of using sales data to make informed business decisions and improve revenue growth. It involves looking at historical sales data to understand market trends and forecast future sales, uncovering what's helping and what's decreasing sales revenue, improving sales team efficiency, and identifying opportunities.

This work focuses on visualizing key patterns from the taken sales data and extracted major features like monthly sales, sales of different product wise in dollars and hourly sales of different products in a day by using python libraries like seaborn, matplot lib, numpy in bar plot graphs.

Data Set:

The Data set was downloaded from Kaggle, which contains data of products which included major columns like name of the product, price of the product, Purchase Address, Order Date, Quantity Ordered, Month which product got sold and more.

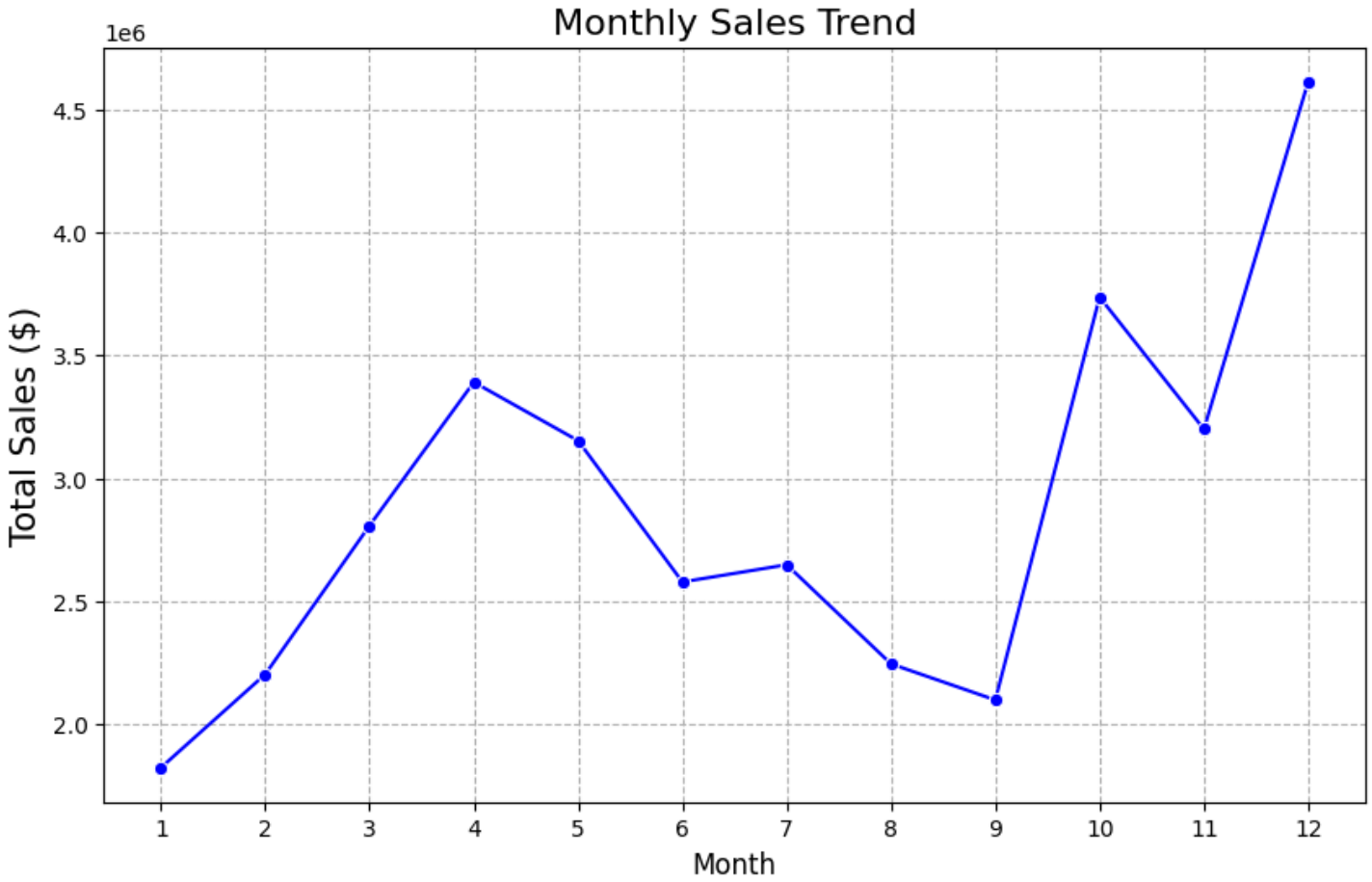
Data Pre-Processing:

The Data set contains a total of 185950 rows x 11 columns where an Unnamed column was removed using

data_cleaned=df.drop(columns=['Unnamed:0']) and **data_cleaned.head()** is used for understanding the header columns clearly. Later, Null values are removed from data using

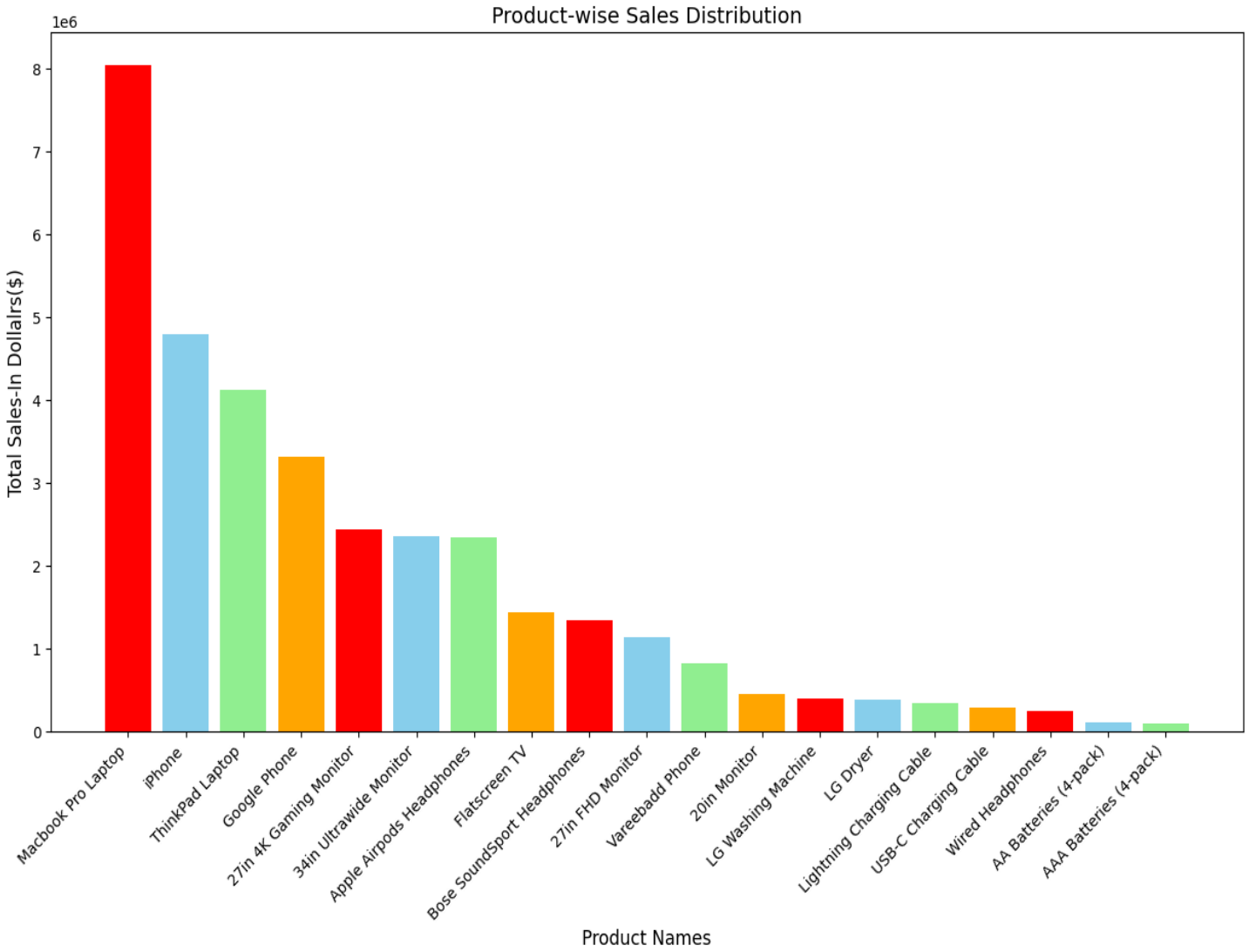
data_cleaned.isnull().sum()

Data Visualization:



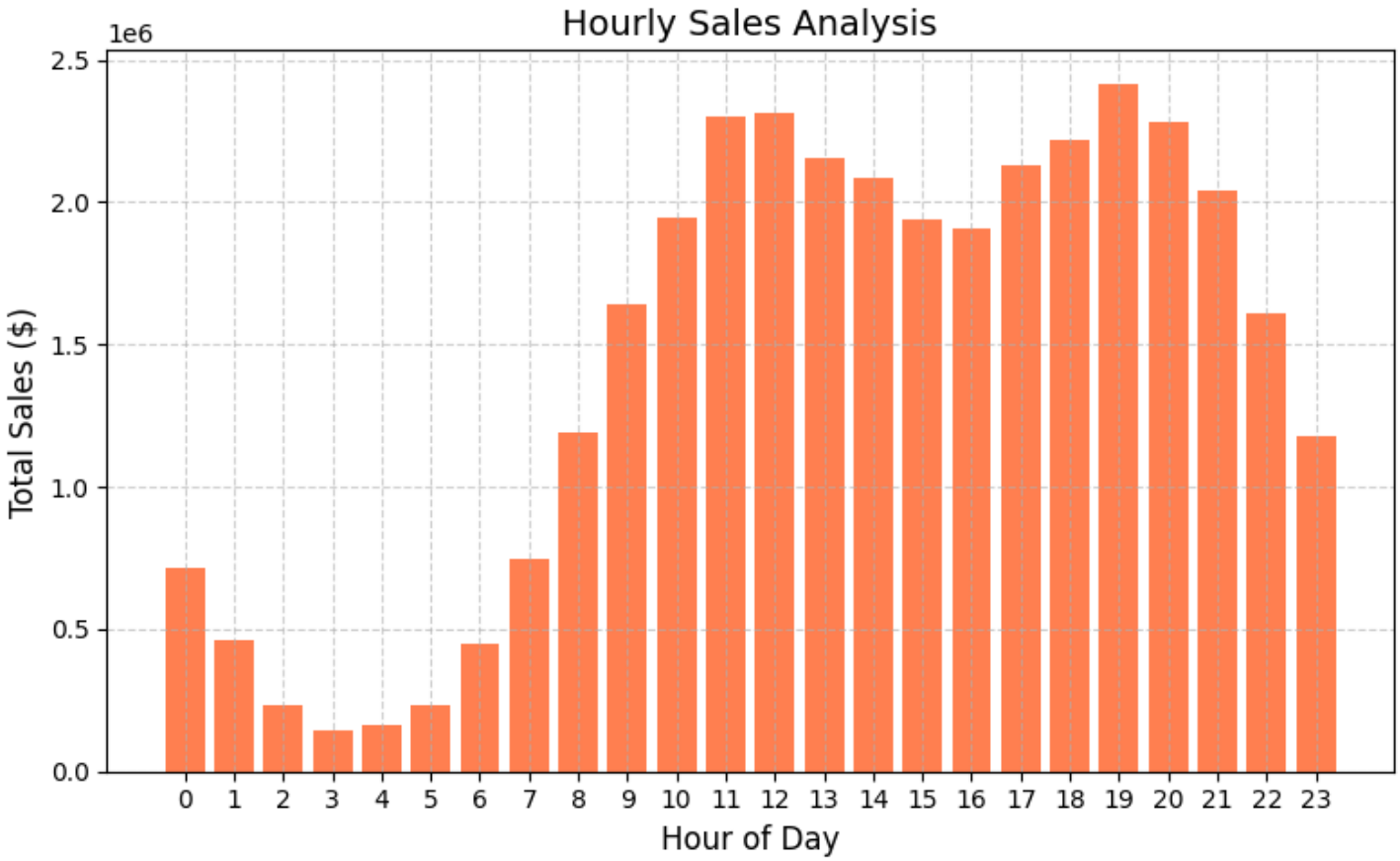
Here is a clear-cut view of sales that happened from month 1 to month 12 average over all products. The graph shows us the sales are gradually increasing and decreasing. The **peak sales happened in the month of 12 i.e., December** where the average sales of all products nearly reached upto 4.8billion Dollars.

PRODUCT-WISE SALES DISTRIBUTION:



The Bar-Graph shows the sales of different kinds of products in a year. From the above graph, we can conclude that the **maximum no.of product sales are MacBook Pro Laptop sales** i.e., nearly 8 billion dollars and the **least product sales were AAA Batteries(4-Pack)** ie., 0.1 Billion in $.

HOURLY SALES DISTRIBUTION:



From the above bar graph, we can conclude that the highest sales of all products had happened at 19th hour of the day i.e., upto 2.8 in dollars.

CONCLUSION:

With my knowledge, I had done the above work from the data and I'm sure that I'll thoroughly work and learn new insights .

DATA-SET_LINK:

https://www.kaggle.com/datasets/beekiran/sales-data-analysis/code

COLLAB WORKSPACE LINK: SALES_REPORT

THANK YOU.