* **Problem Statement:** Vivaan Store, a retail establishment, experienced a decline in sales during the year 2022. To revitalize and increase revenue in the upcoming year 2023, the management seeks a comprehensive data analysis approach. The objective is to identify actionable steps that can be taken to boost sales and generate higher revenue for the store. They need below data to analyze:
  + Compare the sales and orders using single chart.
  + Which month got the highest sales and orders?
  + Who purchased more-men or women in 2022?
  + What are different order status in 2022?
  + List top 5 states contributing to the sales?
  + Relation between age and gender based on number.
  + Which channel is contributing to maximum sales?
* **Steps Taken:** Data Cleaning:
  + Removed duplicate records: Identified and removed any duplicate entries in the dataset.
  + Handled missing data: Addressed missing values by either deleting rows with missing data, imputing values and using appropriate statistical techniques.
  + Corrected data inconsistencies: Checked for inconsistencies or errors in the data, such as misspellings or incorrect formatting, and made necessary corrections.
* Data Formatting:
  + Ensured consistent data types: Made sure that the data types are consistent across the columns.
  + Renamed columns: Gave meaningful and descriptive names to the columns for clarity.
* Data Transformation:
  + Filtered and sorted data: Removed unnecessary data and filtered specific criteria to focus on relevant information. Sorted the data based on relevant columns.
  + Pivot tables: Used pivot tables to summarize and analyze data by creating cross-tabulations and applying functions.
* Data Analysis:
  + Used formulas and functions: Utilized Excel's built-in functions and formulas to perform calculations, statistical analysis, and derived meaningful insights from the data.
  + Charts and graphs: Created visual representations of the data using various chart types like bar graphs, line charts, pie charts, etc., to present trends, comparisons, or distributions.
  + Conditional formatting: Applied formatting rules to highlight important data points or patterns based on specified criteria.
* Report Generation:
  + Created a summary: Summarized the key findings and insights derived from the data analysis process.
  + Designed the report layout: Organized the data and findings in a logical and visually appealing manner. Used heading, subheadings, and sections to improve readability.
  + Included visuals: Inserted charts, graphs, and tables to present data visually and support the analysis.
  + Provided explanations: Added clear and concise explanations of the analysis, methodology, and any assumptions made.
  + Proofread and finalized: Reviewed the report for any errors, spelling mistakes, or inconsistencies, and made necessary revisions.
* **Outcome and suggestions to Vivaan store:**
  + Women are more likely to buy compared to men (~65%)
  + Maharashtra Karnataka and Uttar Pradesh are the top 3 states (~35%)
  + Adult age group (30-49 yrs.) is max contributing (~50%)
  + Amazon, Flipkart and Myntra channels are max contributing (~80%)
* **Conclusion to improve Vivaan store’s sales:**

Target women customers of age group (30-49 yrs.) living in Maharashtra, Karnataka, Uttar Pradesh by showing ads/offers/coupons available on Amazon ,Flipkart and Myntra.