■ Diwali Sales Analysis Summary

Dataset Overview:

• Total records: **11,251**

 Key columns include: Cust_name, Gender, Age Group, State, Zone, Occupation, Product_Category, Orders, and Amount.

Cleaning Performed:

- Removed unnecessary columns: Status and unnamed1 (contain only null values).
- Handled missing values in the Amount column (12 missing entries).

Insights Extracted:

1. Customer Demographics:

- Majority of the customers are from the 26-35 age group.
- Gender distribution shows slightly more female buyers.
- States like Uttar Pradesh, Maharashtra, and Karnataka had the most transactions.

2. Sales Performance:

- The most popular product category during Diwali sales was Auto.
- Highest orders were observed in the Western and Southern zones.
- Top occupations contributing to sales: Healthcare, Government, and IT.

3. Revenue Insights:

- Highest individual sale amounts are in the range of ₹23,000+.
- Certain customer segments (like married individuals aged 26–35) had higher average purchase amounts.

4. Behavioral Patterns:

- $\circ\quad \mbox{{\bf Male}}\ \mbox{{\bf customers}}\ \mbox{{\bf tended}}\ \mbox{{\bf to}}\ \mbox{{\bf place}}\ \mbox{{\bf more}}\ \mbox{{\bf orders}}\ \mbox{{\bf than}}\ \mbox{{\bf female}}\ \mbox{{\bf customers}}.$
- o Single customers placed more frequent but lower-value orders.