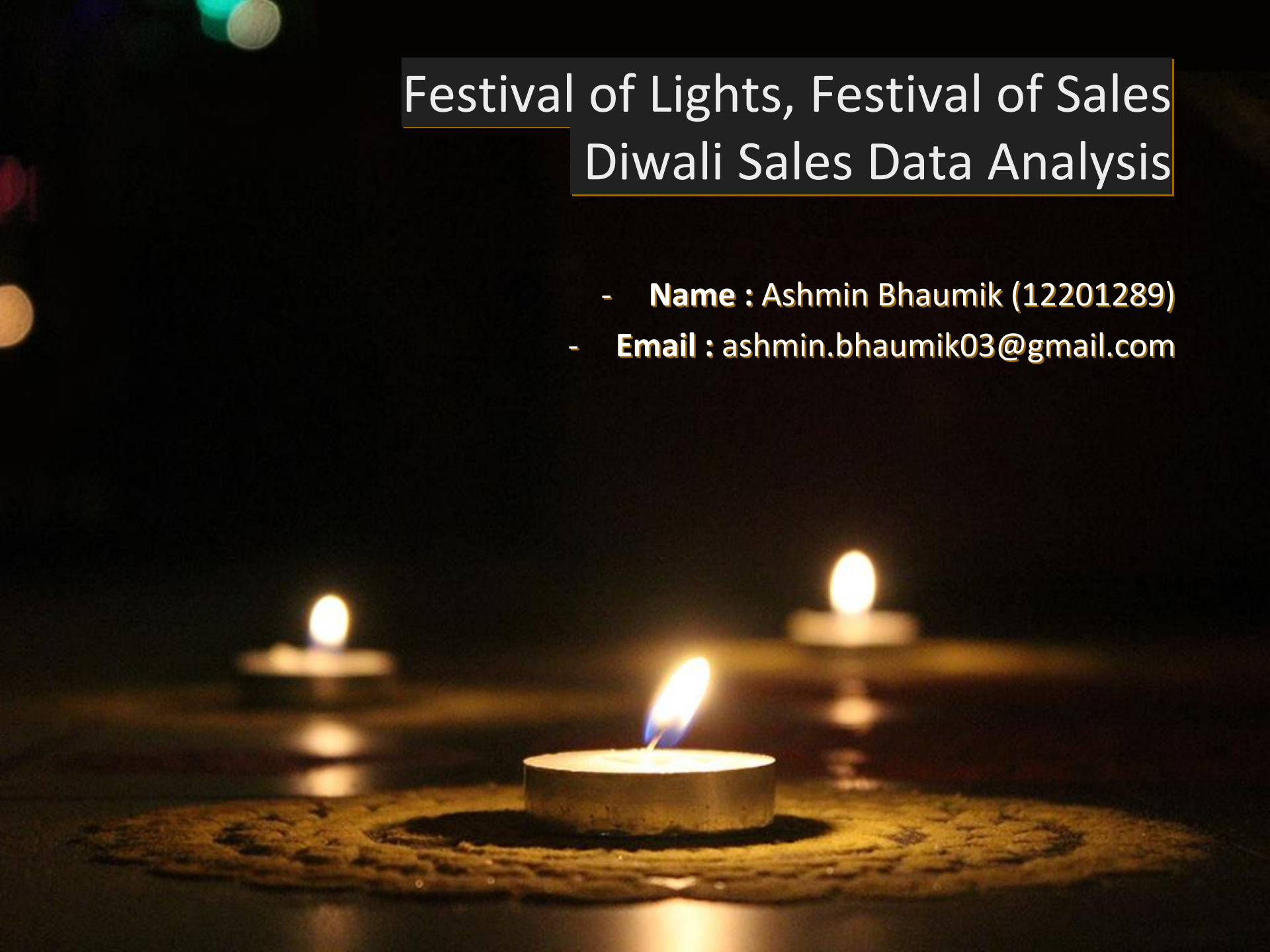


Festival of Lights, Festival of Sales Diwali Sales Data Analysis

- **Name** : Ashmin Bhaumik (12201289)
- **Email** : ashmin.bhaumik03@gmail.com





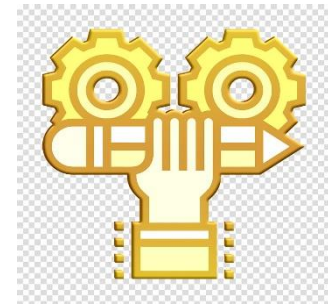
EXECUTIVE SUMMARY

- Introduction
- Methodology
- Results
- Visualization – Charts
- Conclusion



Welcome to our **Diwali Sales Data Presentation**. This **report** provides a **comprehensive analysis** of our **sales** performance **during** the **Diwali season**, showcasing **key metrics** and **insights** derived from **meticulously cleaned** and **modified data**. Our **findings** are visually **represented** through a **variety of charts** to offer **clear** and **actionable** insights.

Ensured the **accuracy** and **consistency** of our data by **removing errors** and **duplicates**, and **standardizing** formats to **enhance readability**. By providing a demographic **breakdown** of our **customer base**, along with an **analysis** of their buying **behavior** and **trends**.



- ☐ Data Collection Sources:
 - From SIR
- ☐ Data Exploration
- ☐ Data Cleaning
- ☐ Data Visualization
- ☐ Dashboard & Storytelling
- ☐ Presentation



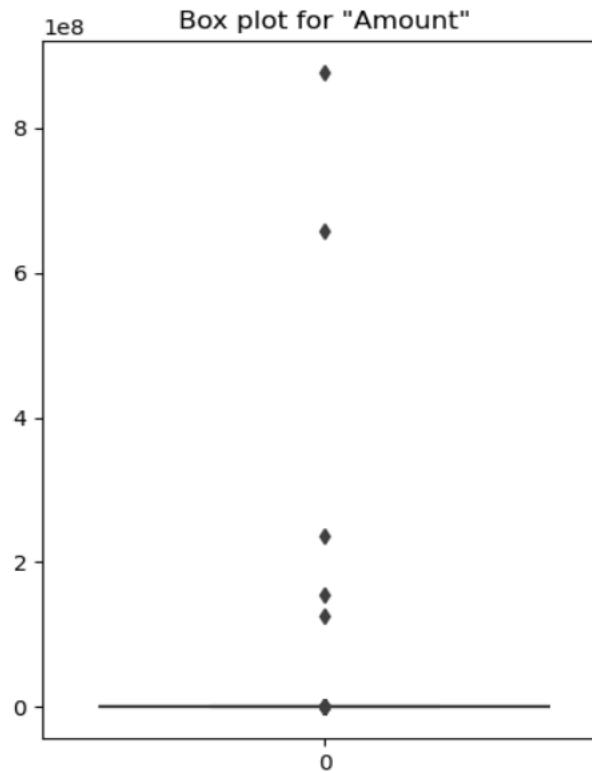
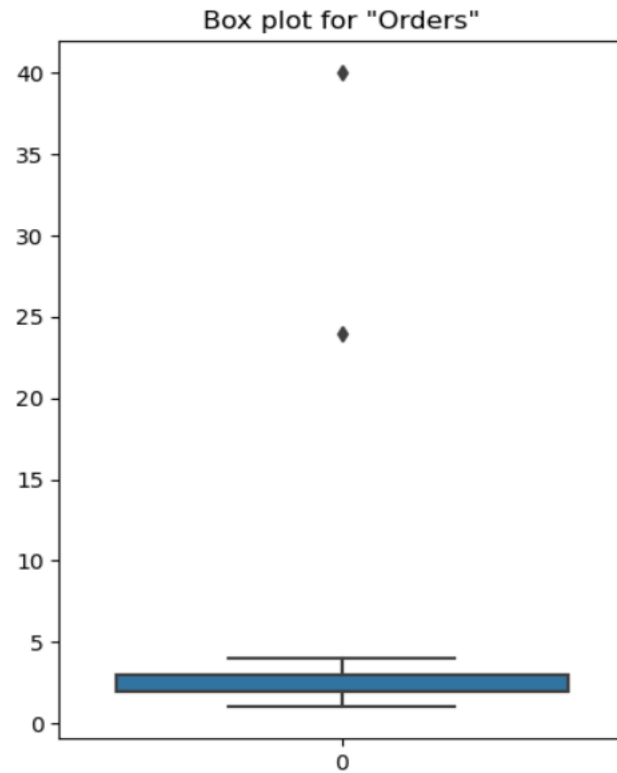
User_ID	Cust_name	Product_ID	Gender	Age Group	Age	Marital_Status	State	Zone	Occupation	Product_Category	Orders	Amount	Status	unnamed1
1002903.0	Sanskriti	P00125942	F	26-35	28	0.0	Maharashtra	Western	Healthcare	Auto	1.0	23952	NaN	NaN
1000732.0	Kartik	P00110942	F	26-35	35	1.0	Andhra Pradesh	Southern	Govt	Auto	3.0	23934	NaN	NaN
1001990.0	Bindu	P00118542	F	26-35	35	1.0	Uttar Pradesh	Central	Automobile	Auto	3.0	23924	NaN	NaN
1001425.0	Sudevi	P00237842	M	0-17	16	0.0	Karnataka	Southern	Construction	Auto	2.0	23912	NaN	NaN
1000588.0	Joni	P00057942	M	26-35	28	1.0	Gujarat	Western	Food Processing	Auto	2.0	23877	NaN	NaN
1000588.0	Joni	P00057942	M	26-35	28	1.0	Himachal Pradesh	Northern	Food Processing	Auto	1.0	23877	NaN	NaN
1001132.0	Balk	P00018042	F	18-25	25	1.0	Uttar Pradesh	Central	Lawyer	Auto	4.0	23841	NaN	NaN
1002092.0	Shivangi	P00273442	F	55+	61	0.0	Maharashtra	Western	IT Sector	Auto	1.0	NaN	NaN	NaN
1003224.0	Kushal	P00205642	M	26-35	NaN	0.0	Uttar Pradesh	Zentral	Govt	Auto	2.0	23809	NaN	NaN
1003650.0	Ginny	P00031142	F	26-35	NaN	1.0	Andhra Pradesh	Southern	Media	Auto	4.0	23799.99	NaN	NaN

	User_ID	Cust_name	Product_ID	Gender	Age Group	Age	Marital_Status	State	Zone	Occupation	Product_Category	Orders	Amount	marriage_status
0	1002903.0	Sanskriti	P00125942	F	26-35	28	0.0	Maharashtra	Western	Healthcare	Auto	1.0	23952.00	Unmarried
1	1000732.0	Kartik	P00110942	F	26-35	35	1.0	Andhra Pradesh	Southern	Govt	Auto	3.0	23934.00	Married
2	1001990.0	Bindu	P00118542	F	26-35	35	1.0	Uttar Pradesh	Central	Automobile	Auto	3.0	23924.00	Married
3	1001425.0	Sudevi	P00237842	M	0-17	16	0.0	Karnataka	Southern	Construction	Auto	2.0	23912.00	Unmarried
4	1000588.0	Joni	P00057942	M	26-35	28	1.0	Gujarat	Western	Food Processing	Auto	2.0	23877.00	Married
5	1000588.0	Joni	P00057942	M	26-35	28	1.0	Himachal Pradesh	Northern	Food Processing	Auto	1.0	23877.00	Married
6	1001132.0	Balk	P00018042	F	18-25	25	1.0	Uttar Pradesh	Central	Lawyer	Auto	4.0	23841.00	Married
8	1003224.0	Kushal	P00205642	M	26-35	NaN	0.0	Uttar Pradesh	Zentral	Govt	Auto	2.0	23809.00	Unmarried
9	1003650.0	Ginny	P00031142	F	26-35	NaN	1.0	Andhra Pradesh	Southern	Media	Auto	4.0	23799.99	Married
10	1003829.0	Harshita	P00200842	M	26-35	NaN	0.0	Delhi	Central	Banking	Auto	1.0	23770.00	Unmarried

```
dataCopy.isnull().sum()
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Cust_name    0
Product_ID   0
Gender       2
Age Group    5
Age          9
Marital_Status 5
State        0
Zone         0
Occupation   5
Product_Category 0
Orders       0
Amount       0
Status       11254
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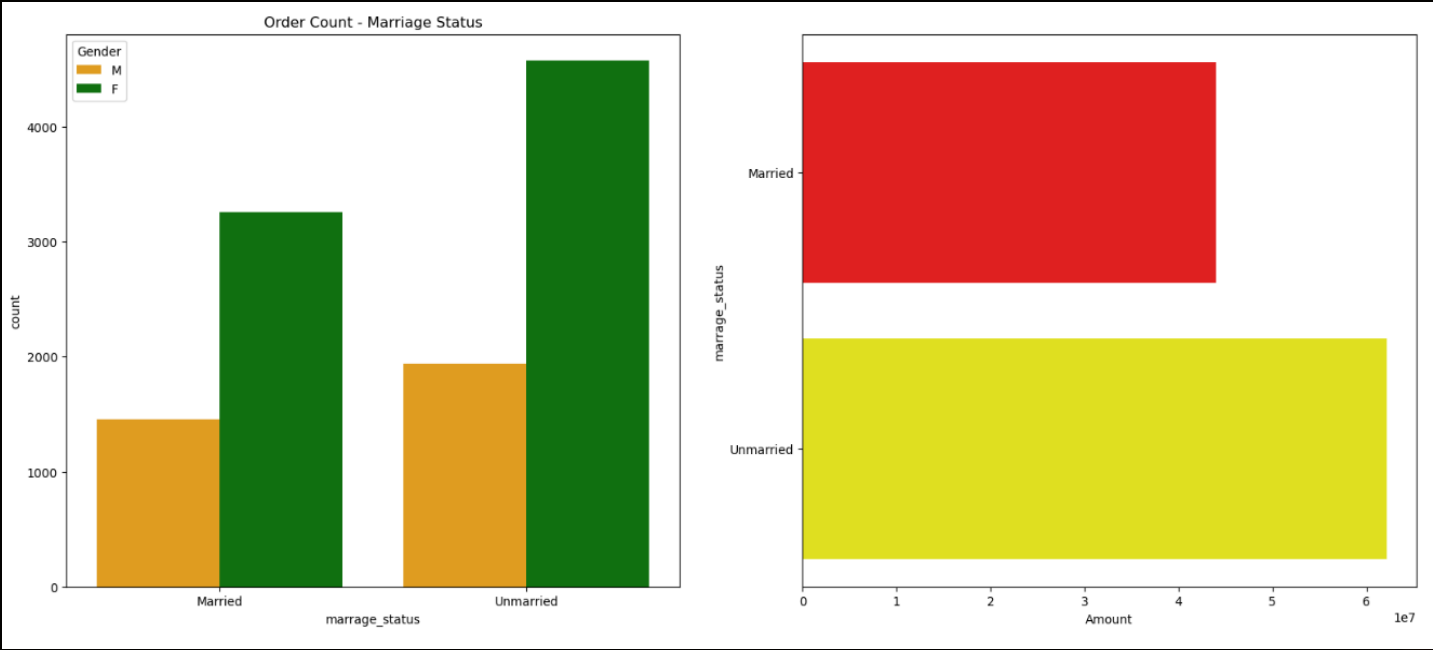
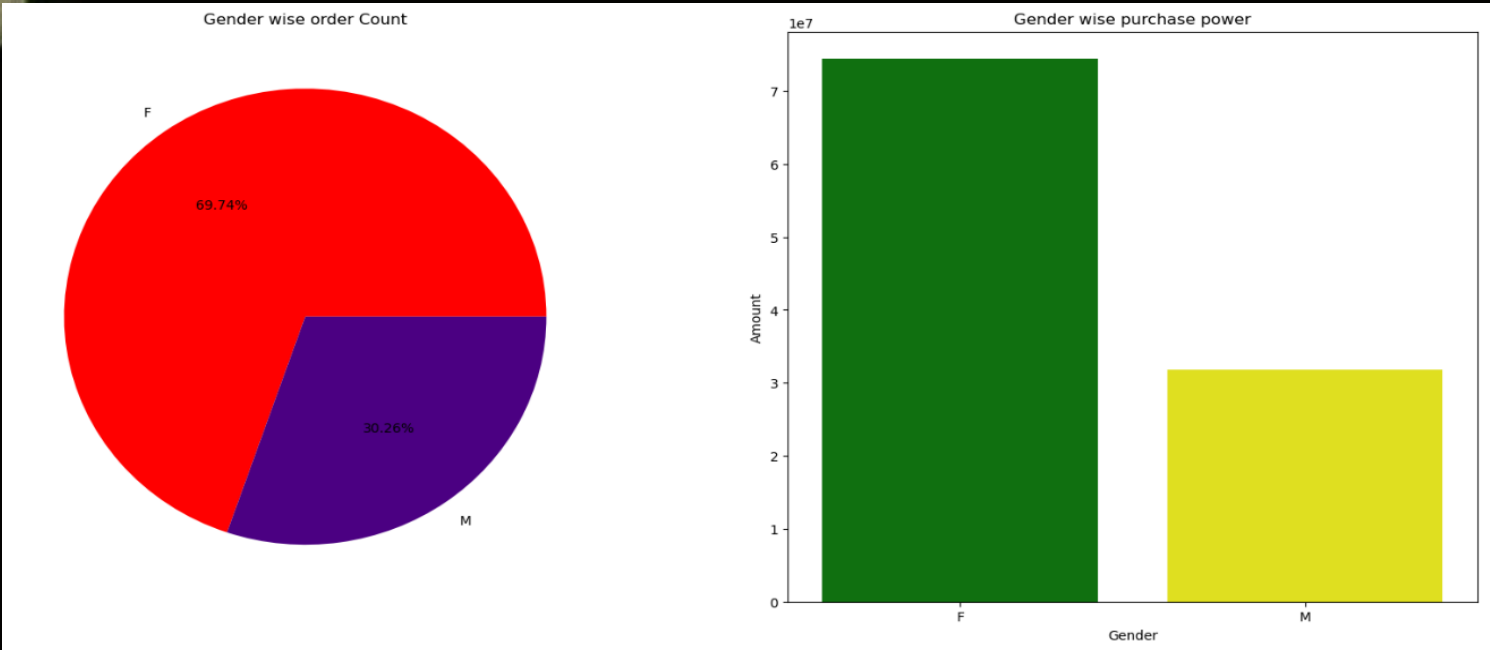
Data Vizualization

Analysis Parameter

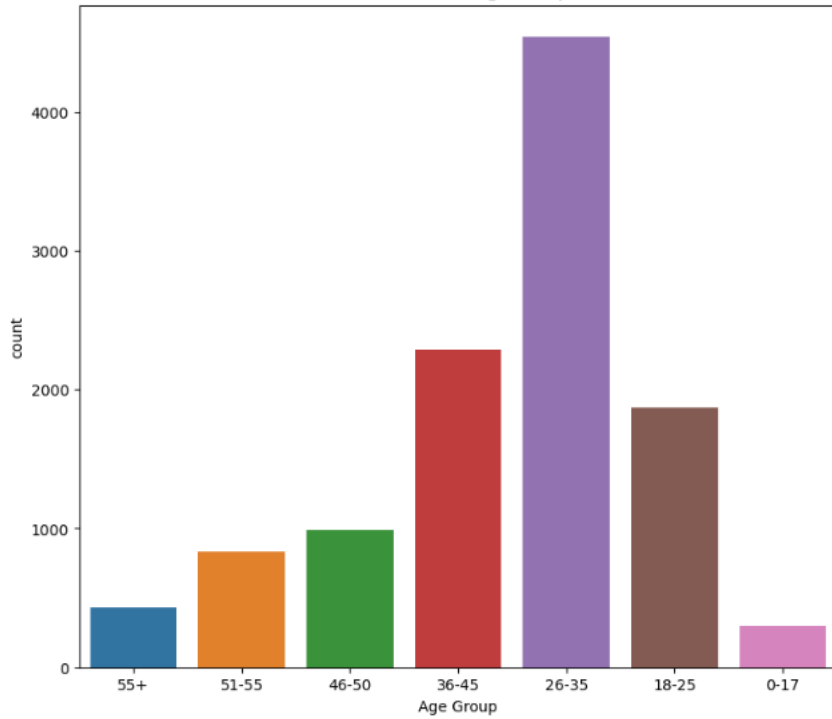
- Gender
- Marriage_Status
- Age group
- Product_Category
- State
- Product ID
- Occupation

```
dataCopy.describe()
```

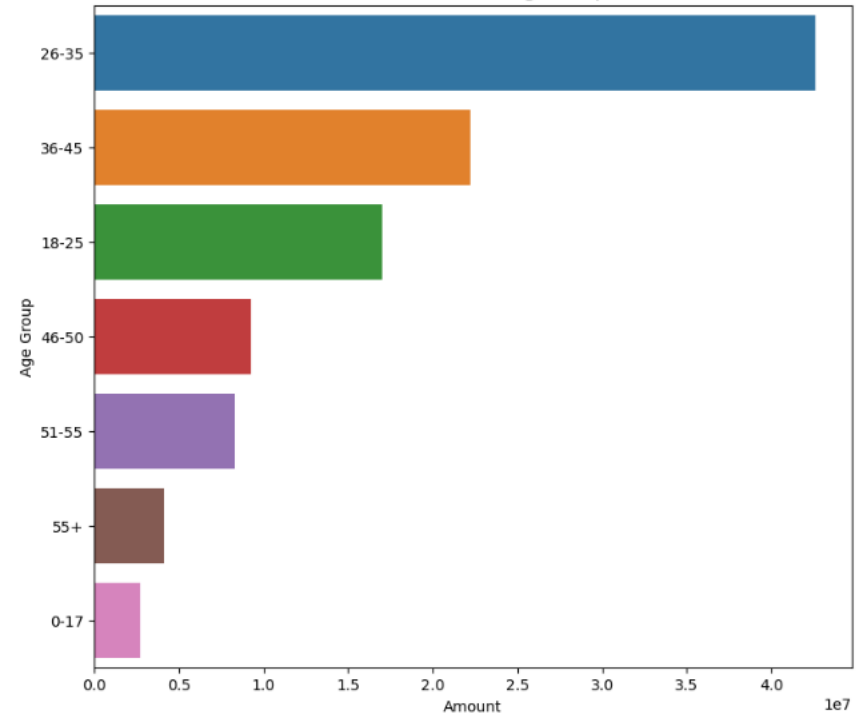
	User_ID	Age	Marital_Status	Orders	Amount
count	1.123400e+04	11234.000000	11234.000000	11234.000000	11234.000000
mean	1.007453e+06	35.433772	0.419708	2.489496	9452.764638
std	2.109026e+05	12.759432	0.493533	1.114845	5213.784648
min	1.000001e+06	12.000000	0.000000	1.000000	188.000000
25%	1.001496e+06	27.000000	0.000000	2.000000	5443.000000
50%	1.003064e+06	33.000000	0.000000	2.000000	8109.500000
75%	1.004429e+06	43.000000	1.000000	3.000000	12681.500000
max	1.100173e+07	92.000000	1.000000	4.000000	23568.000000



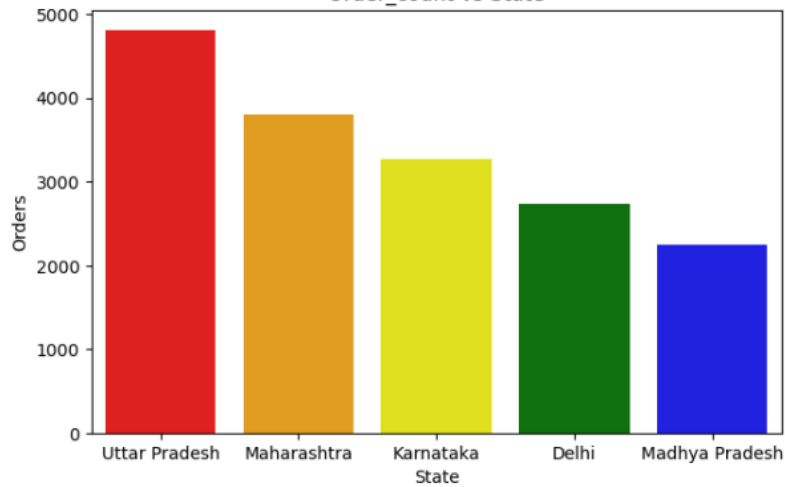
Order Count - Age Group



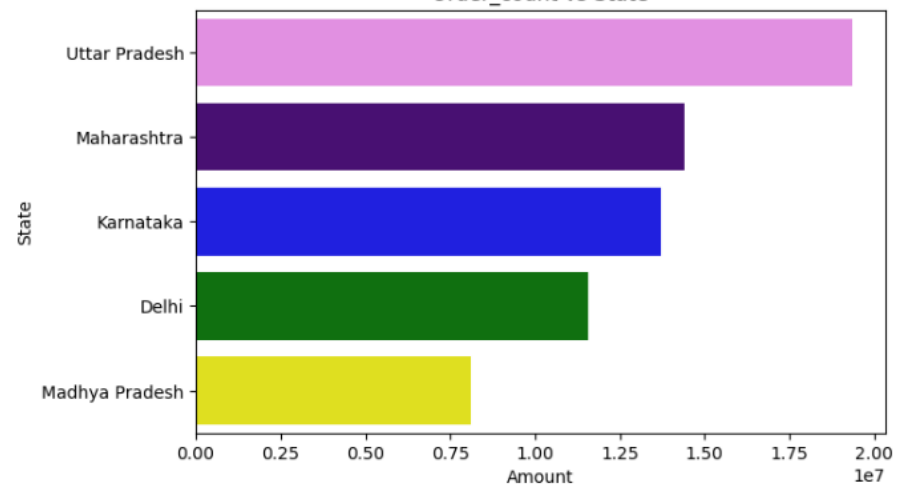
Purchase Power vs Age Group



Order_count vs State



Order_count vs State





CONCLUSION

- **Females** have **purchased** more **products** than **males**.
- **Unmarried individuals** have **bought** more **products** than **married individuals**.
- The **age group** of **26-35** has **purchased** more **products** than any **other age** group.
- **Uttar Pradesh** has **recorded** the **highest Diwali** sales.



Thank you!