**DIWALI SALE ANALYSIS**

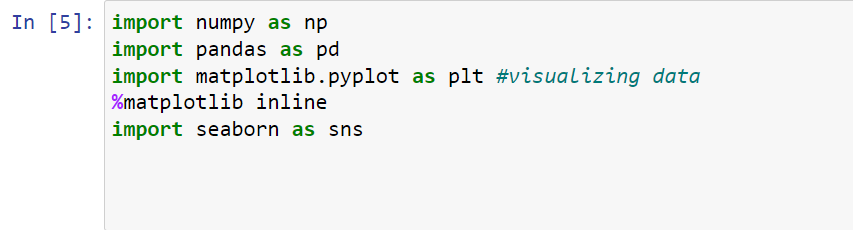
**By USING PYTHON**

**OBJECTIVE:**

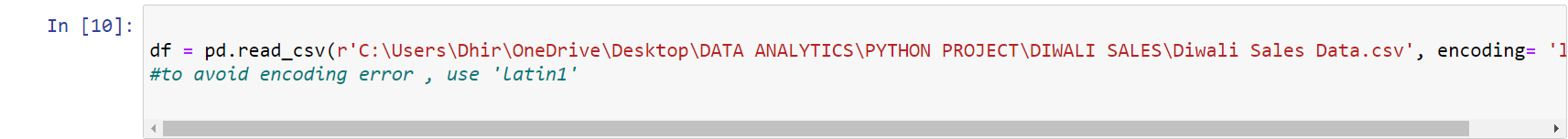
* Improve customer experience by analyzing sales data.
* For increasing revenue

**STEPS USE FOR ANALYZING DATA:**

**STEP 1.** Import libraries such as numpy, pandas, matplotlib.pyplot and seaborn.

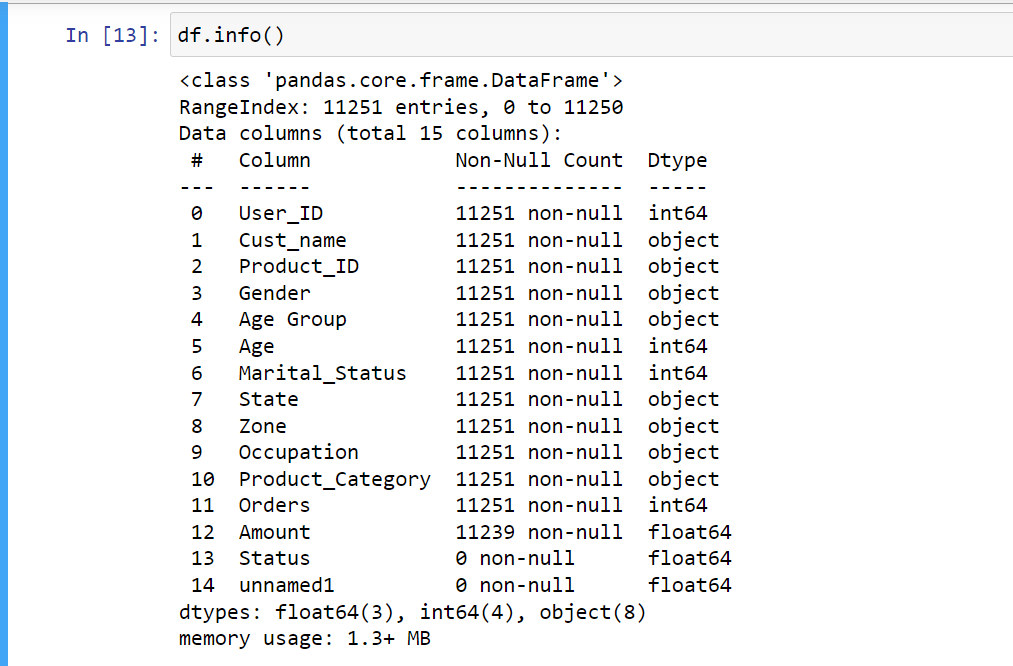


**STEP 2.** Import Diwali Sales Analysis csv file on python.

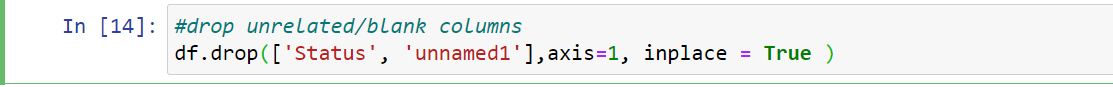


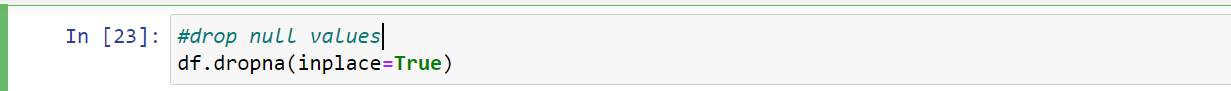
**We use Latin1 to avoid encoding error.**

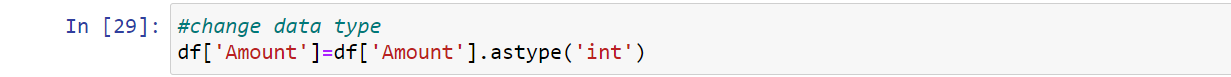
**STEP 3.** Data Cleaning.

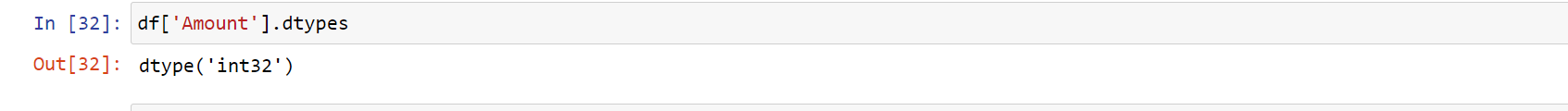


**Status and unamed1 are 2 columns which are null.**

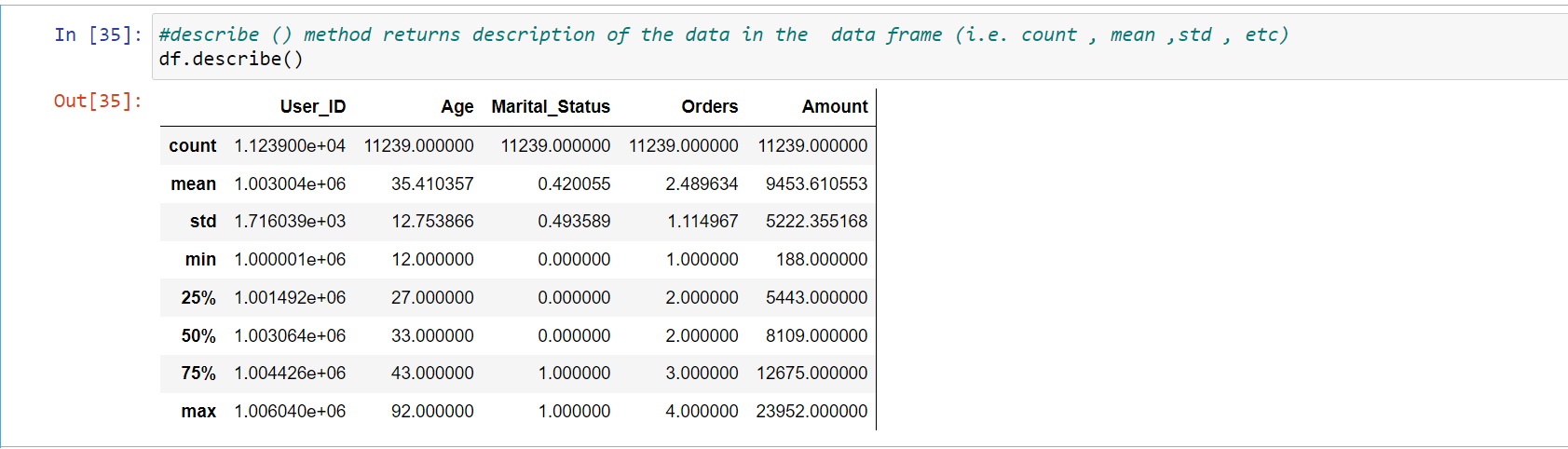


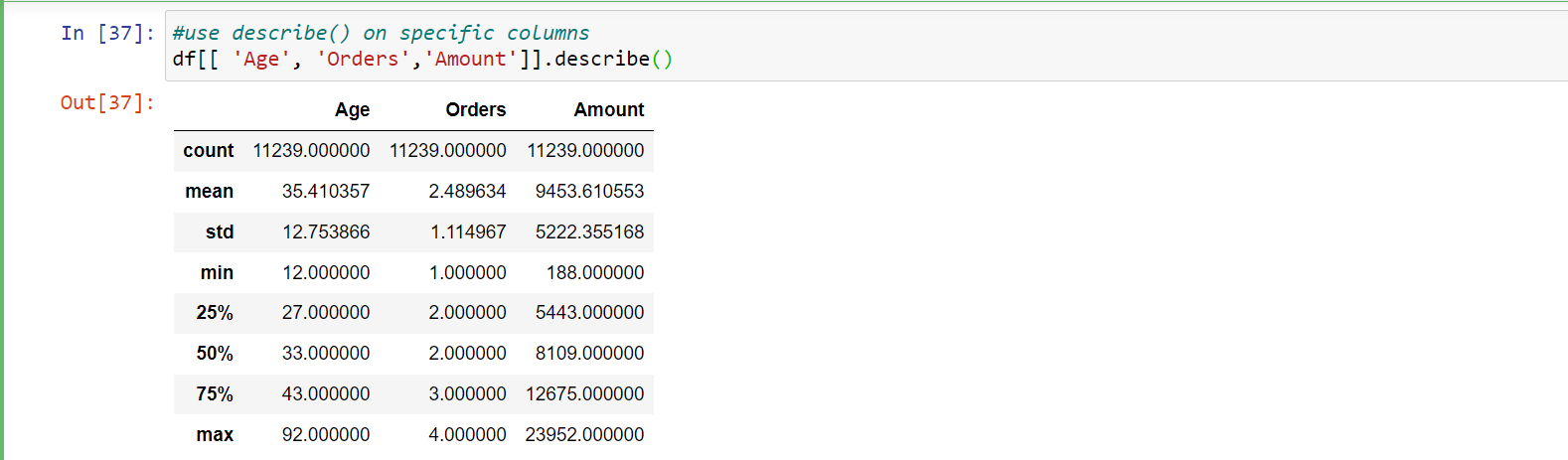






**We can see after change datatype to ‘int’ by using astype the value of amount now becomes integer.**

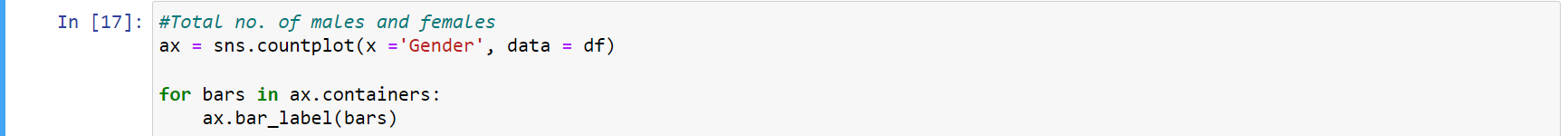


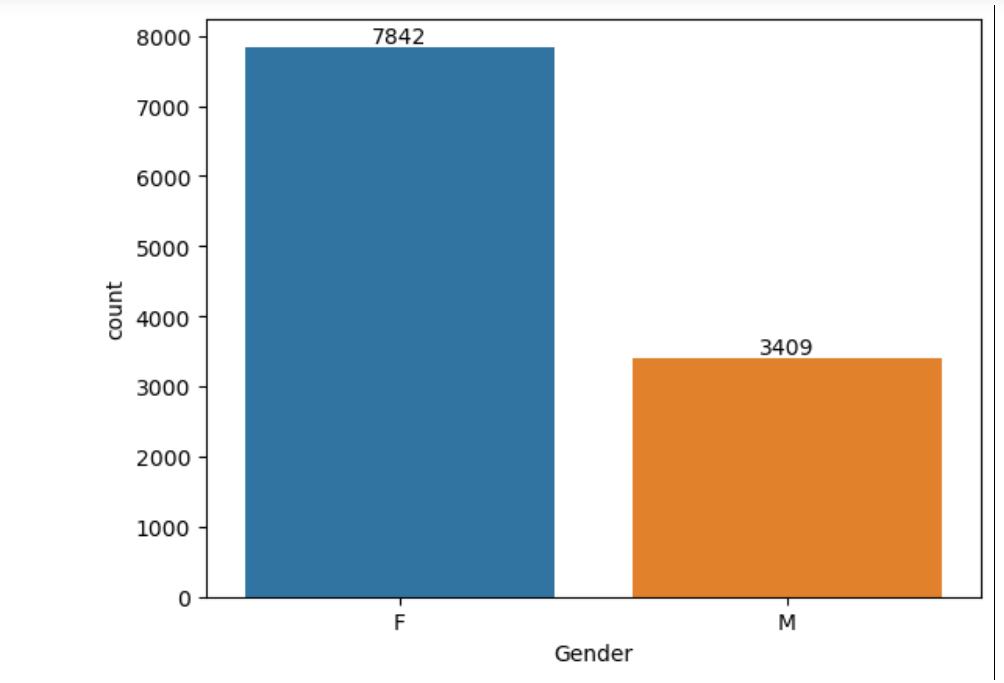


**After doing all these steps Data Cleaning is completed.**

**STEP 4.** Exploratory Data Analytics

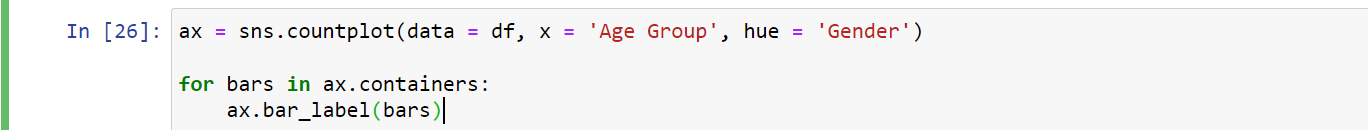
**1.GENDER**

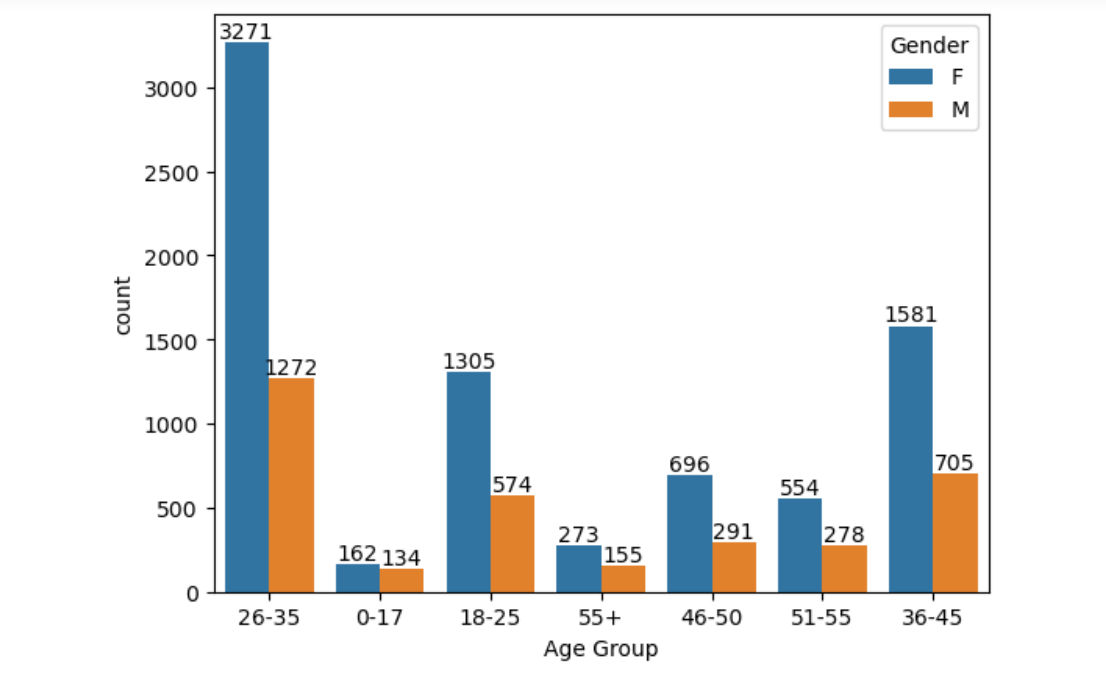


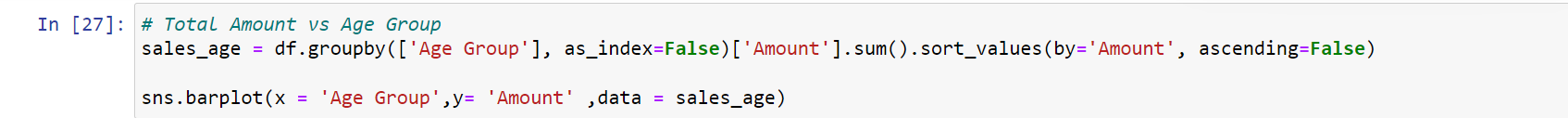


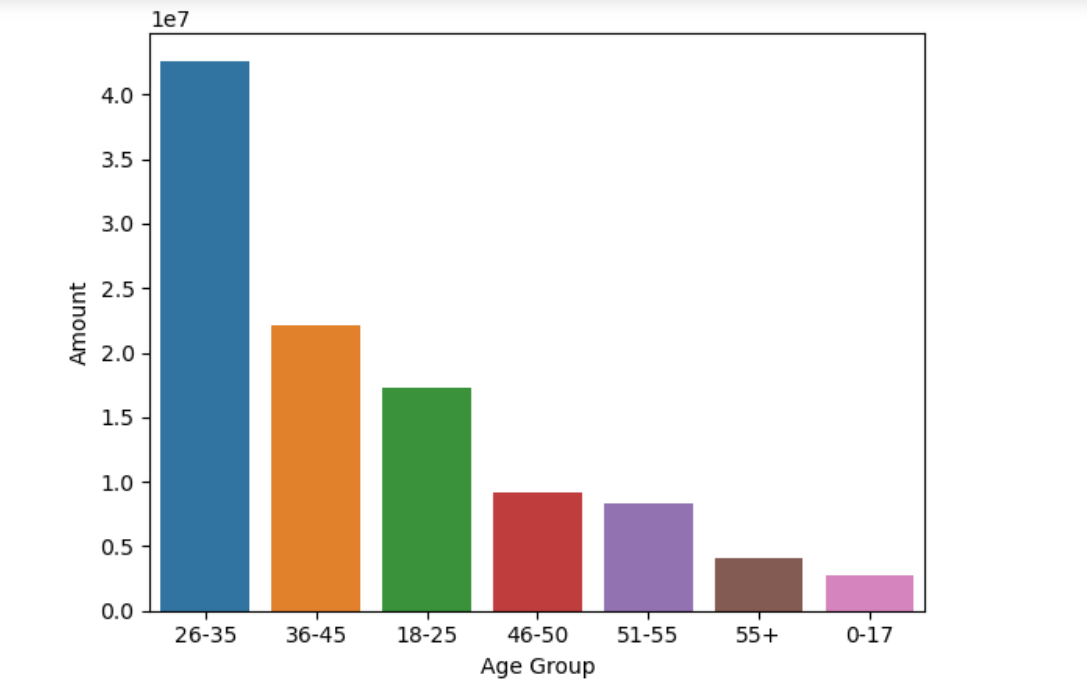
**From above graphs we can see that most of the buyers are females and even the purchasing power of females are greater than men**

**2.AGE**



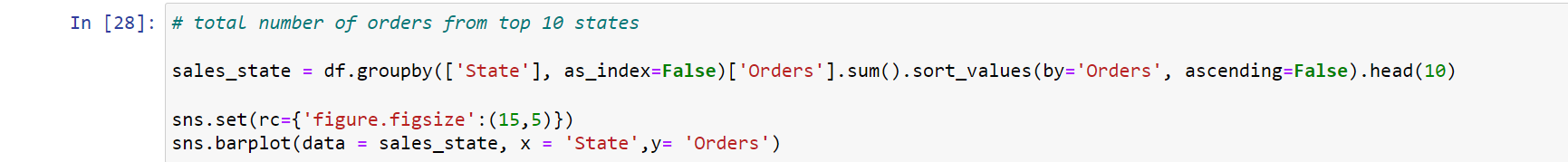


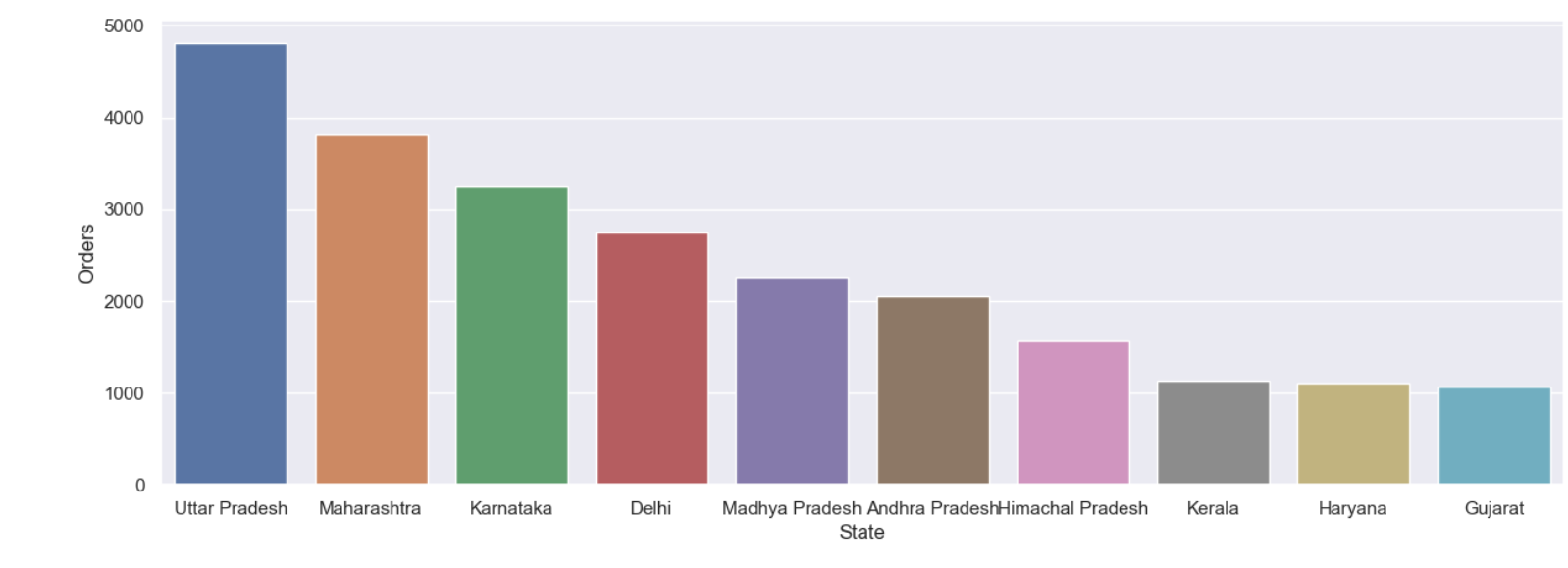


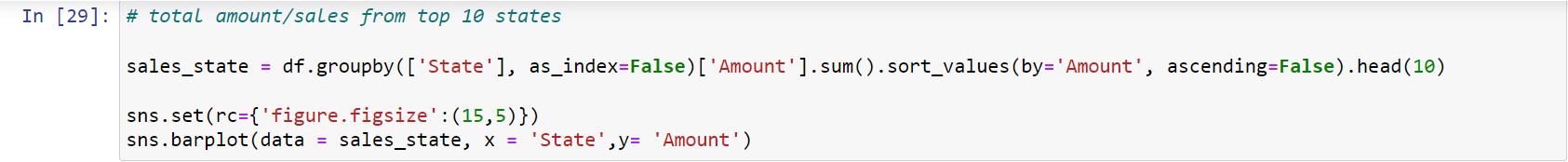


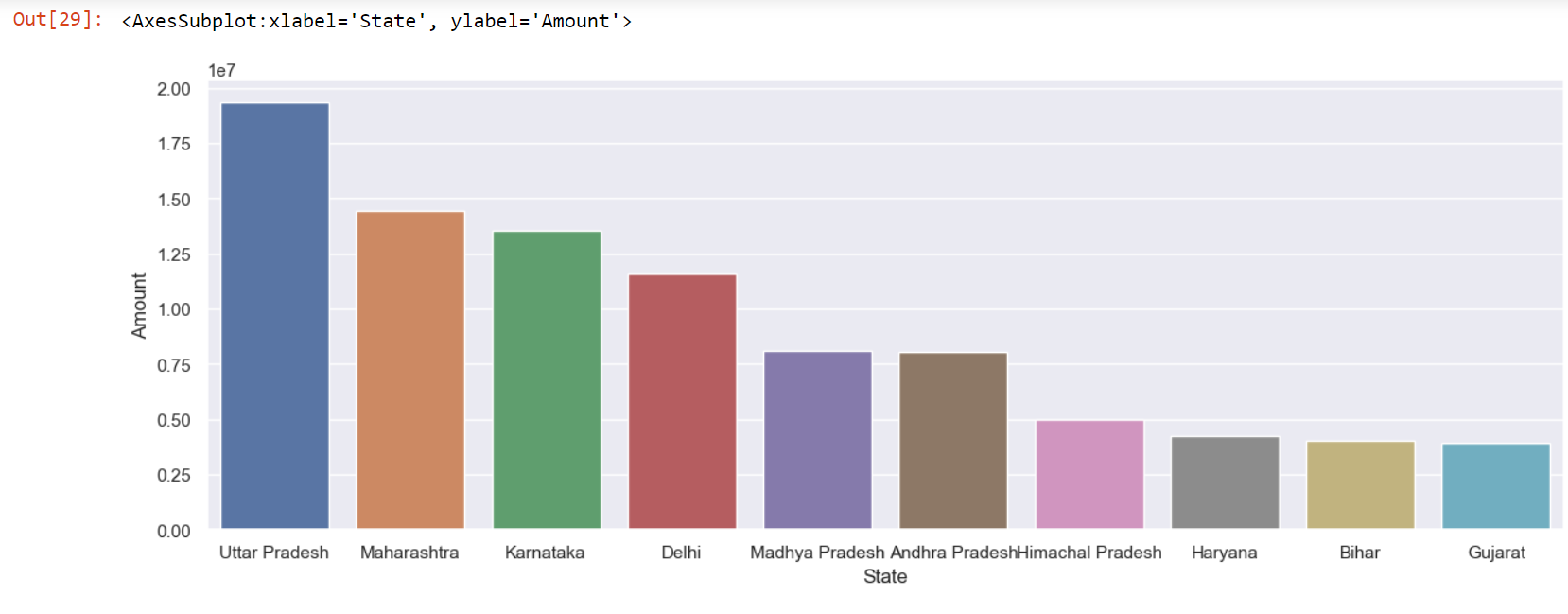
**From above graphs we can see that most of the buyers are of age group between 26-35 years female**

**3.STATE**



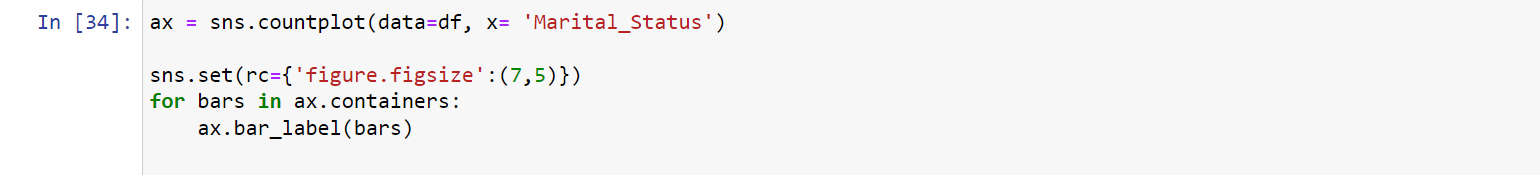


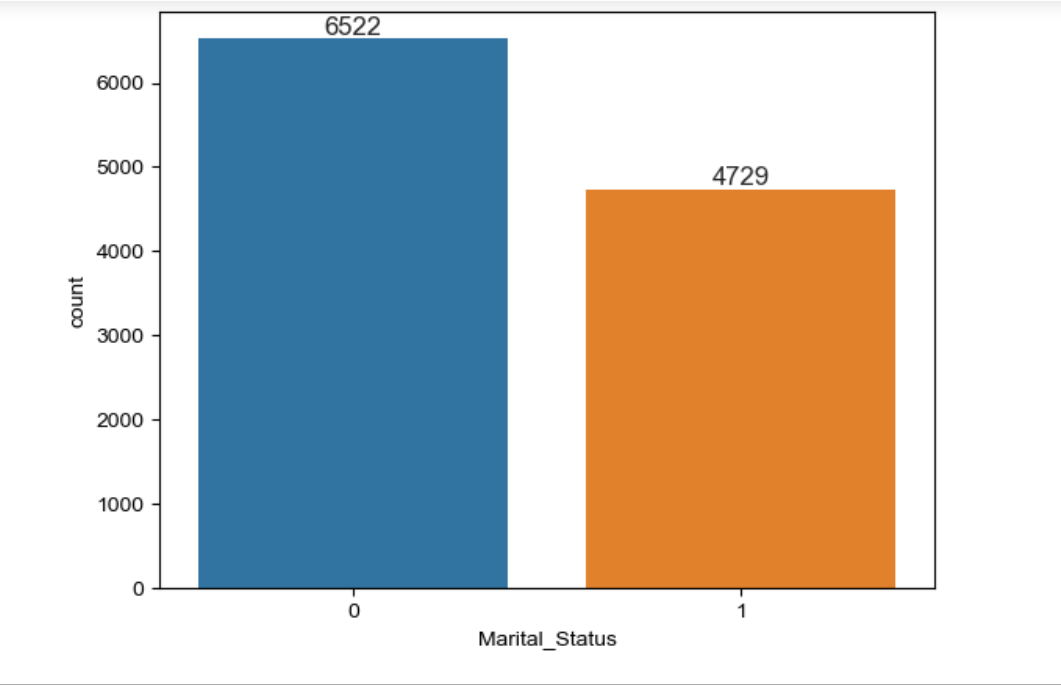


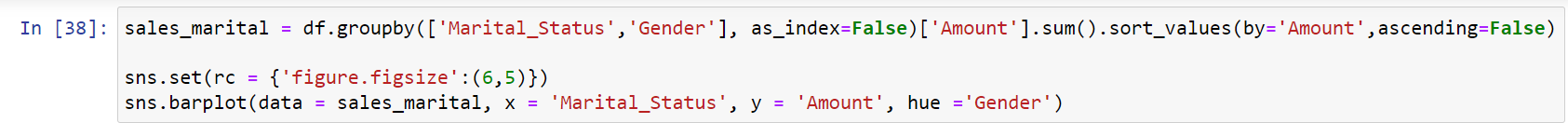


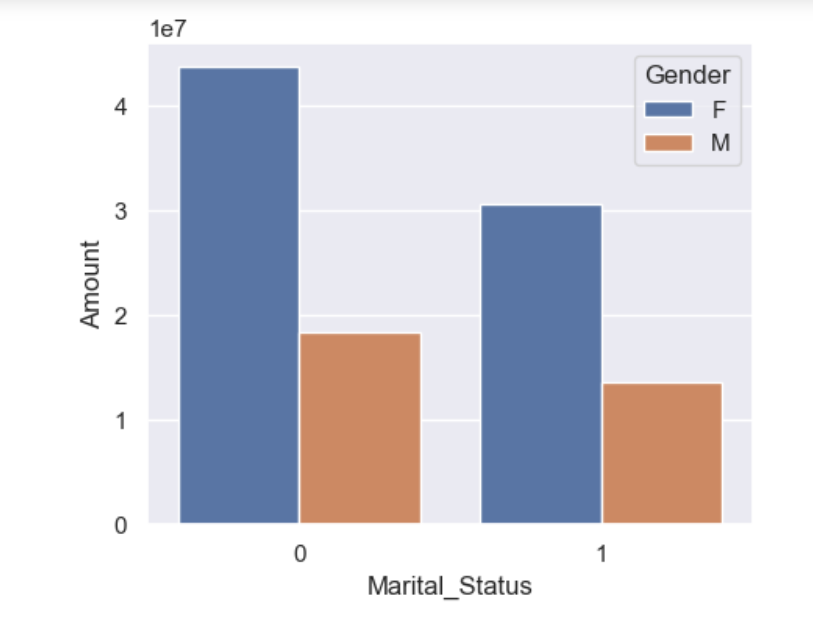
**From above graphs we can see that most of the orders & total sales/amount are from Uttar Pradesh, Maharashtra and Karnataka respectively.**

**4.MARITAL STATUS**

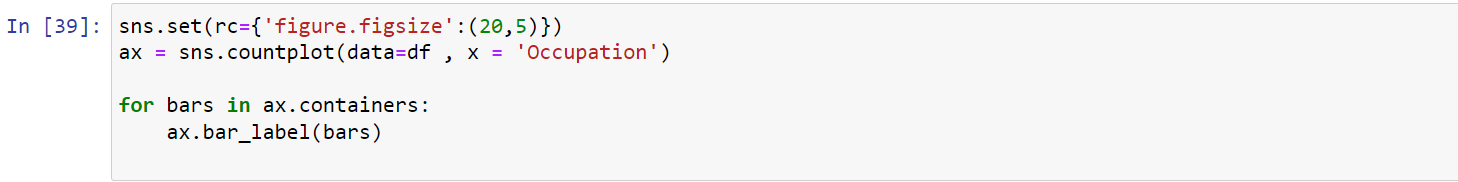


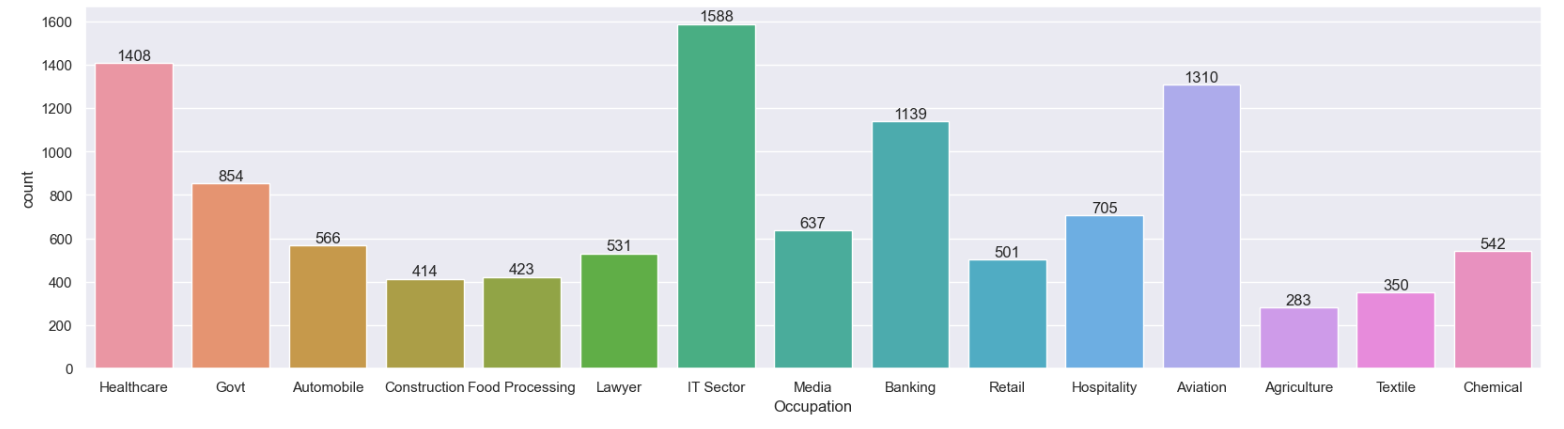


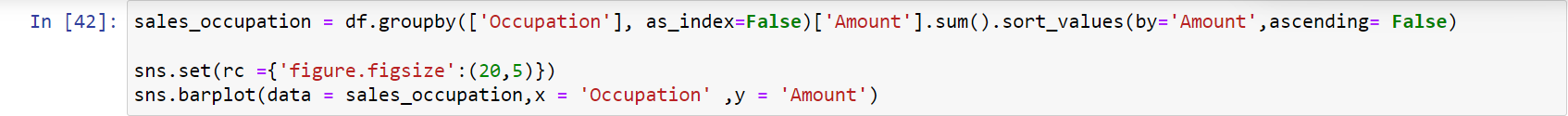


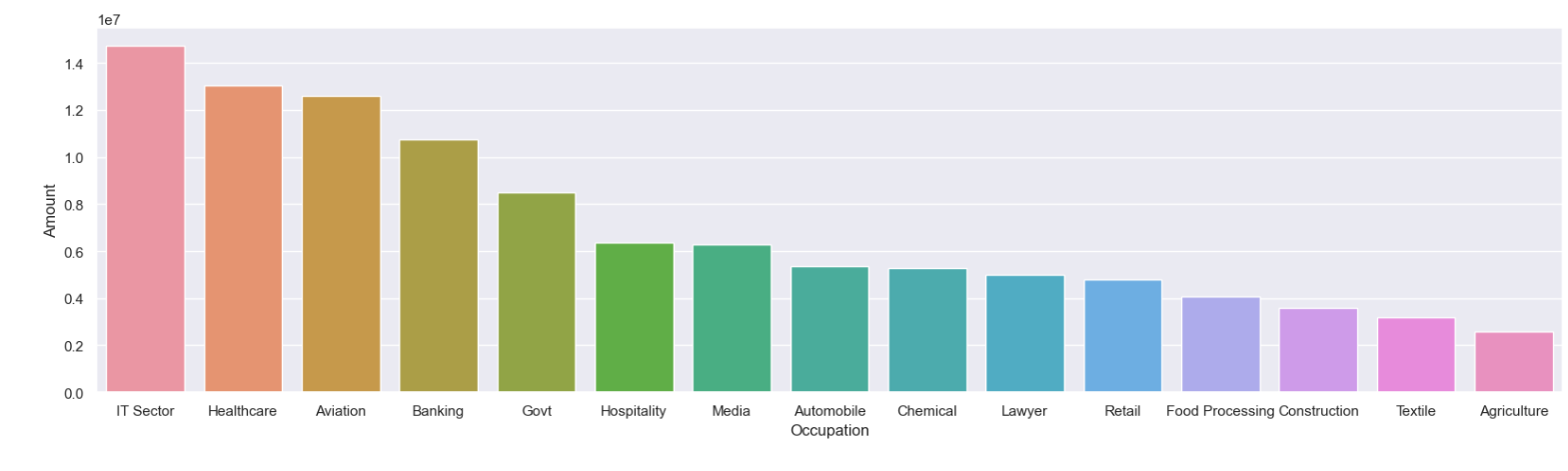
**From above graphs we can see that most of the buyers are married (women) and they have high purchasing power.**

**5.OCCUPATION**



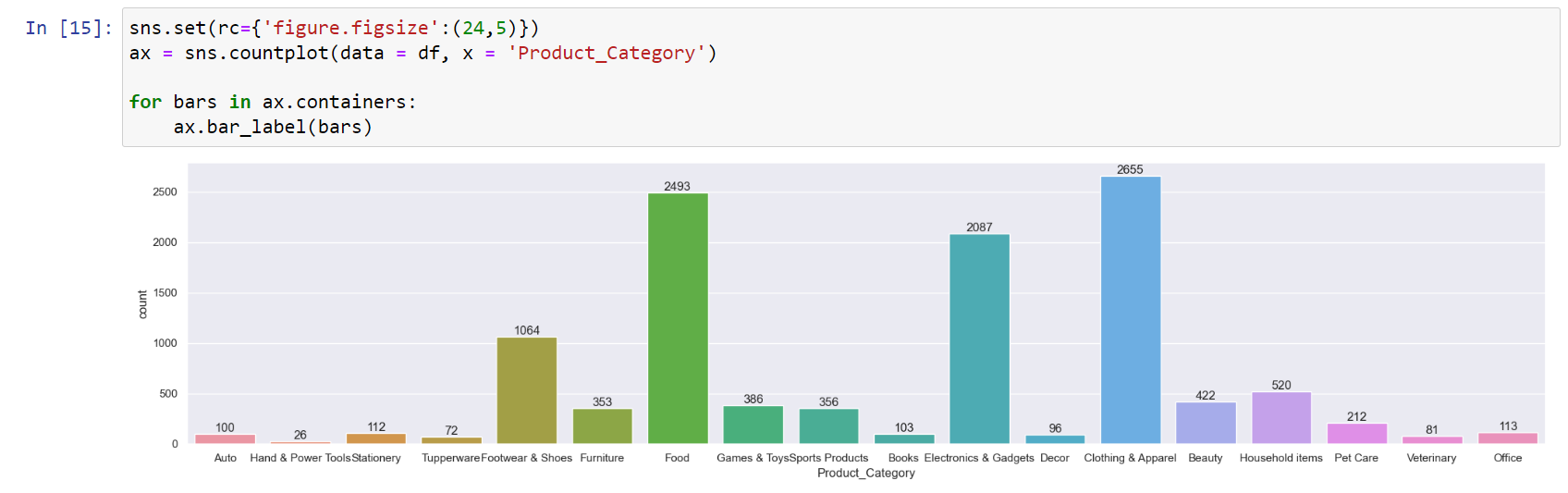


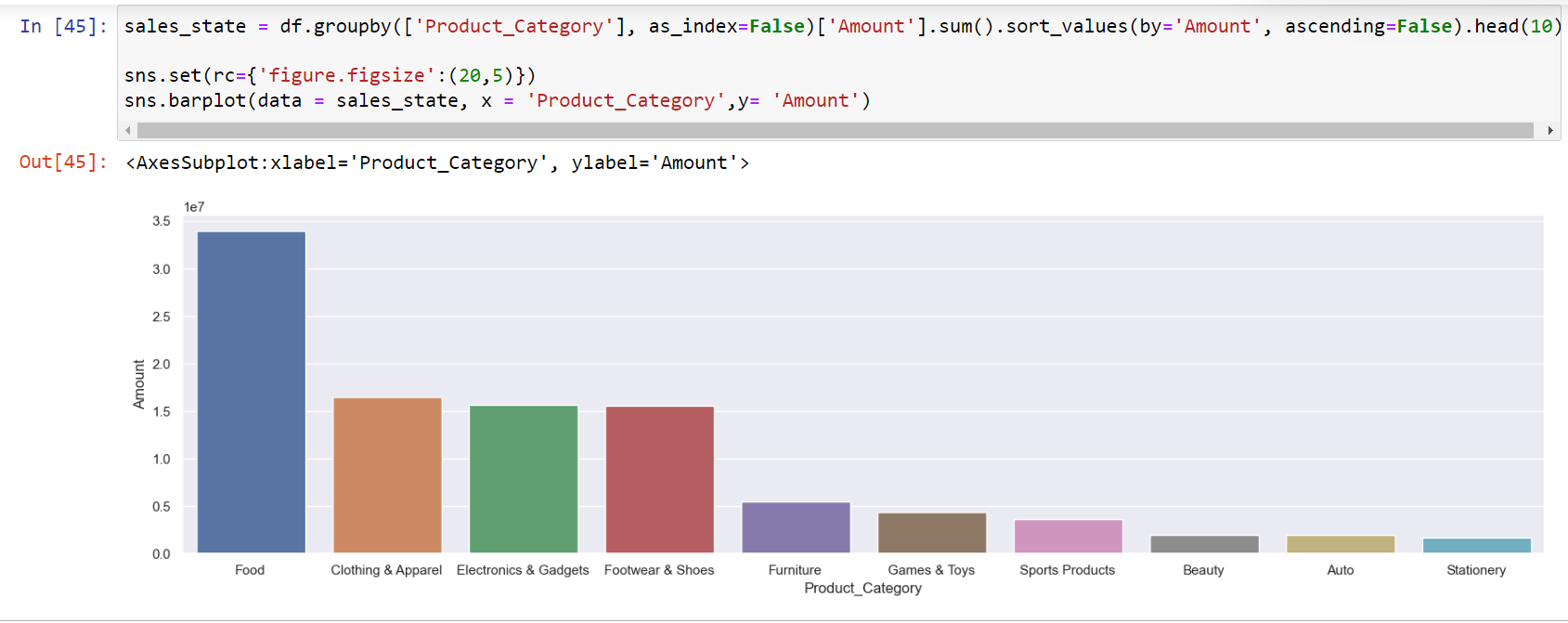




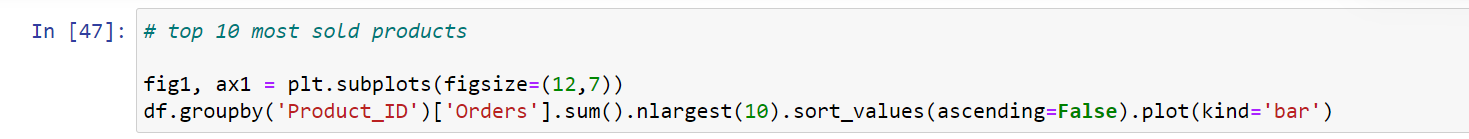
**From above graphs we can see that most of the buyers are working in IT, Healthcare and Aviation sector.**

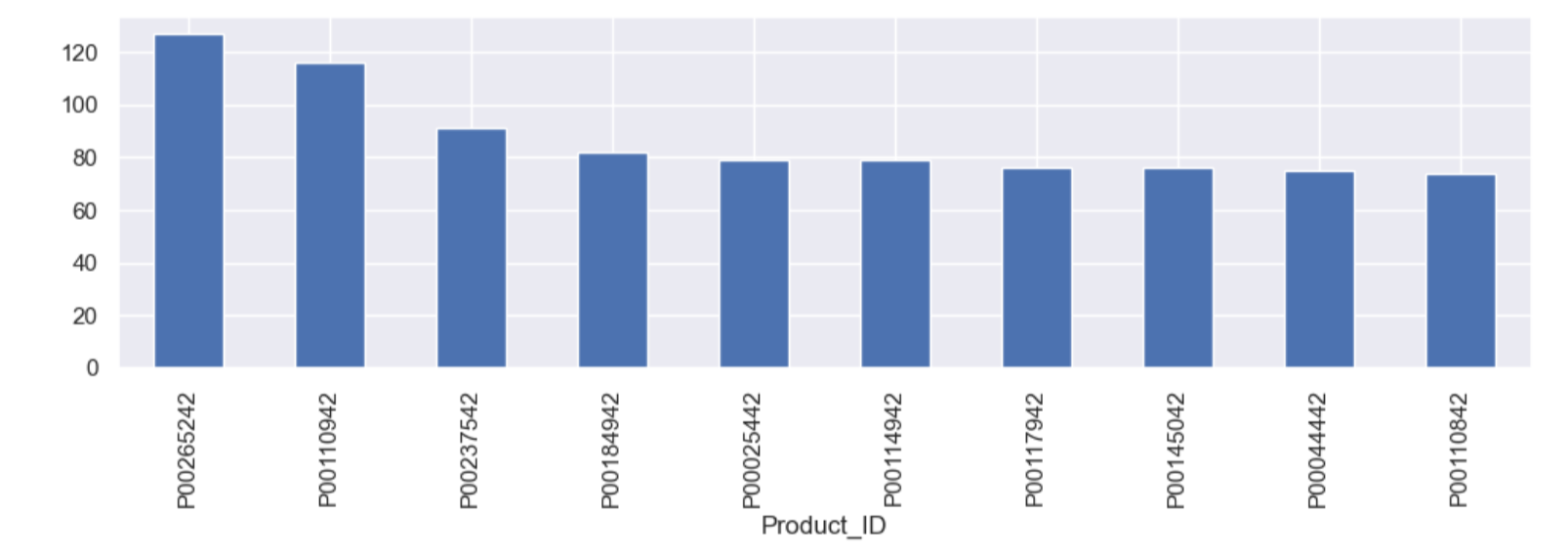
**6.PRODUCT CATEGORY**





**From above graphs we can see that most of the sold products are from Food, Clothing and Electronics category**





**CONCLUSION:**

Married women age group 26-35 years from UP, Maharashtra and Karnataka working in IT, Healthcare and Aviation are more likely to buy products from Food, Clothing and Electronics category

**Thank You!**