

```
C:\Users\AKASH\PycharmProjects\ITV\venv\Scripts\python.exe C:/Users/AKASH/PycharmProjects/ITV/RetailCaseStudy.py
```

```
customer_Id      int64
DOB              object
Gender           object
city_code        float64
transaction_id   int64
cust_id          int64
tran_date        object
prod_subcat_code int64
prod_cat_code    int64
Qty              int64
Rate             int64
Tax             float64
total_amt        float64
Store_type       object
_merge           category
prod_cat         object
prod_sub_cat_code int64
prod_subcat      object
dtype: object
```

	customer_Id	DOB	Gender	...	prod_cat	prod_sub_cat_code	prod_subcat
0	268408	2-1-70	M	...	Books	7	Fiction
1	268408	2-1-70	M	...	Books	12	Academic
2	268408	2-1-70	M	...	Books	10	Non-Fiction
3	268408	2-1-70	M	...	Books	11	Children
4	268408	2-1-70	M	...	Books	3	Comics
5	268408	2-1-70	M	...	Books	6	DIY
6	268159	8-1-70	F	...	Books	7	Fiction
7	268159	8-1-70	F	...	Books	12	Academic
8	268159	8-1-70	F	...	Books	10	Non-Fiction
9	268159	8-1-70	F	...	Books	11	Children

[10 rows x 18 columns]

	customer_Id	DOB	Gender	...	prod_cat	prod_sub_cat_code	prod_subcat
99283	274618	9-12-92	F	...	Clothing	3	Kids
99284	268097	15-12-92	F	...	Clothing	4	Mens
99285	268097	15-12-92	F	...	Clothing	1	Women
99286	268097	15-12-92	F	...	Clothing	3	Kids
99287	271772	17-12-92	M	...	Clothing	4	Mens
99288	271772	17-12-92	M	...	Clothing	1	Women
99289	271772	17-12-92	M	...	Clothing	3	Kids
99290	269626	27-12-92	F	...	Clothing	4	Mens
99291	269626	27-12-92	F	...	Clothing	1	Women
99292	269626	27-12-92	F	...	Clothing	3	Kids

[10 rows x 18 columns]

Minimum = -8270.925

Maximum = 8287.5

Median = 1761.37

Q1 = 762.45

Q3 = 3585.725

	TeleShop	MBR	e-shop	Flagshipstore					
Male	9767	9687	9159	19589					
Female	10047	10278	10142	20584					
	Books	Bags	Clothing	Footwear	Electronics	Home	and kitchen		
Male	1988	17694	4317	11640	4587		7976		
Female	2008	18696	4554	12850	4407		8536		
	Men	Women	Kid	Mobile	...	Furnishing	Kitchen	Bath	Tools
Male	2949	2328	1994	2328	...	2949	2328	1994	3962
Female	3116	2570	2134	2570	...	3116	2570	2134	3991

```
[2 rows x 18 columns]
30246
32589
31866
4592
count of negative total_amt    9294
dtype: int64
The most popular product category in Male customers is : prod_cat
Books    39875836.65
Name: total_amt, dtype: float64
The most popular product category in Female customers is : prod_cat
Books    36988153.41
Name: total_amt, dtype: float64
City code which has Maximum customers is : city_code
3.0    595
Name: count, dtype: int64
Percentage of customers is city_code
3.0    10.54
Name: count, dtype: float64
47986    TeleShop
Name: Store_type, dtype: object
Total amount earned 14658949.89
Total amount earned in Electronics by male : 28515547.125
Total customers having more than 10 unique transactions are : 20876
Total amount earned 21751521.675
Total amount spent by the customer - 1324083.93000000002

Process finished with exit code 0
```

Figure 1

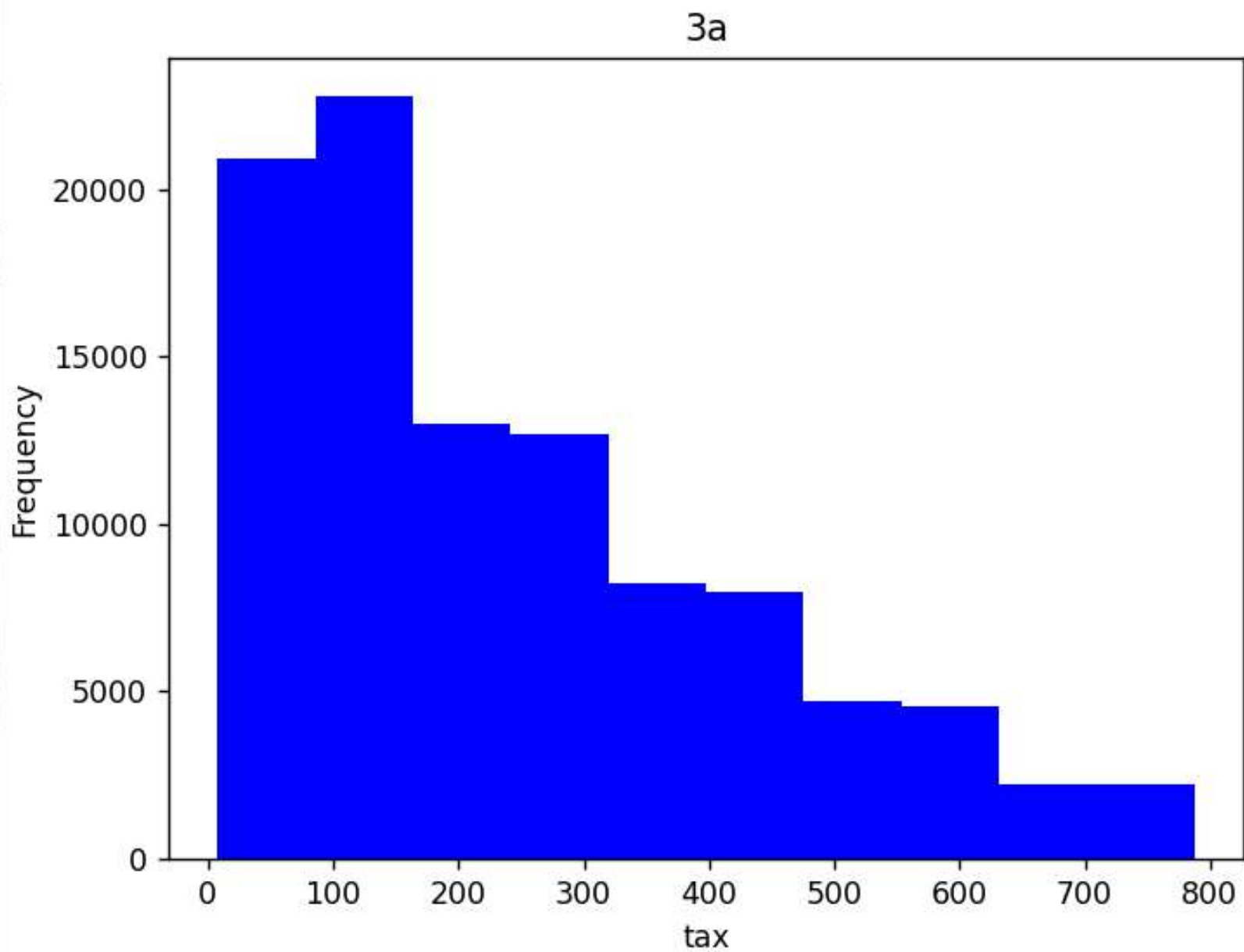


Figure 1

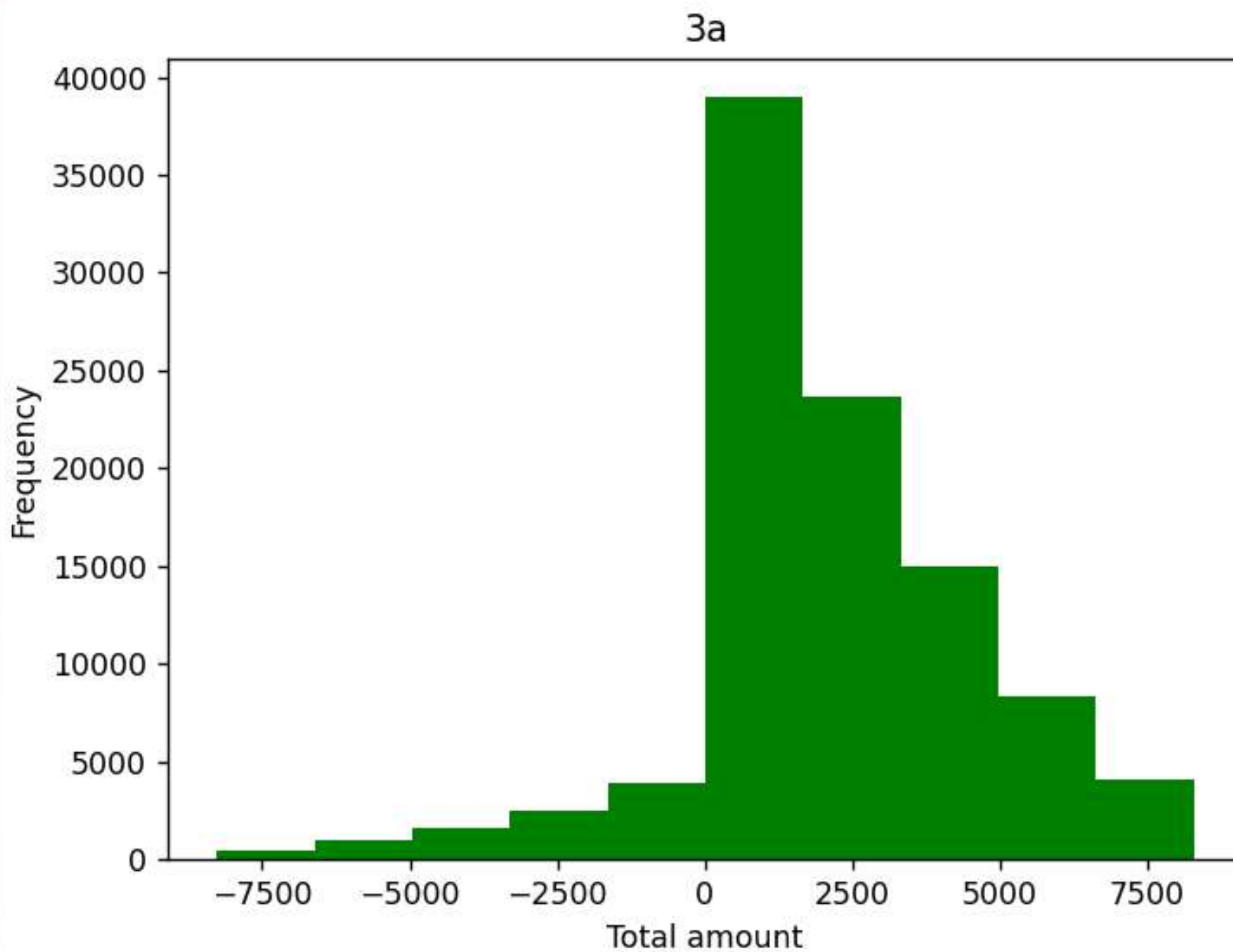




Figure 1

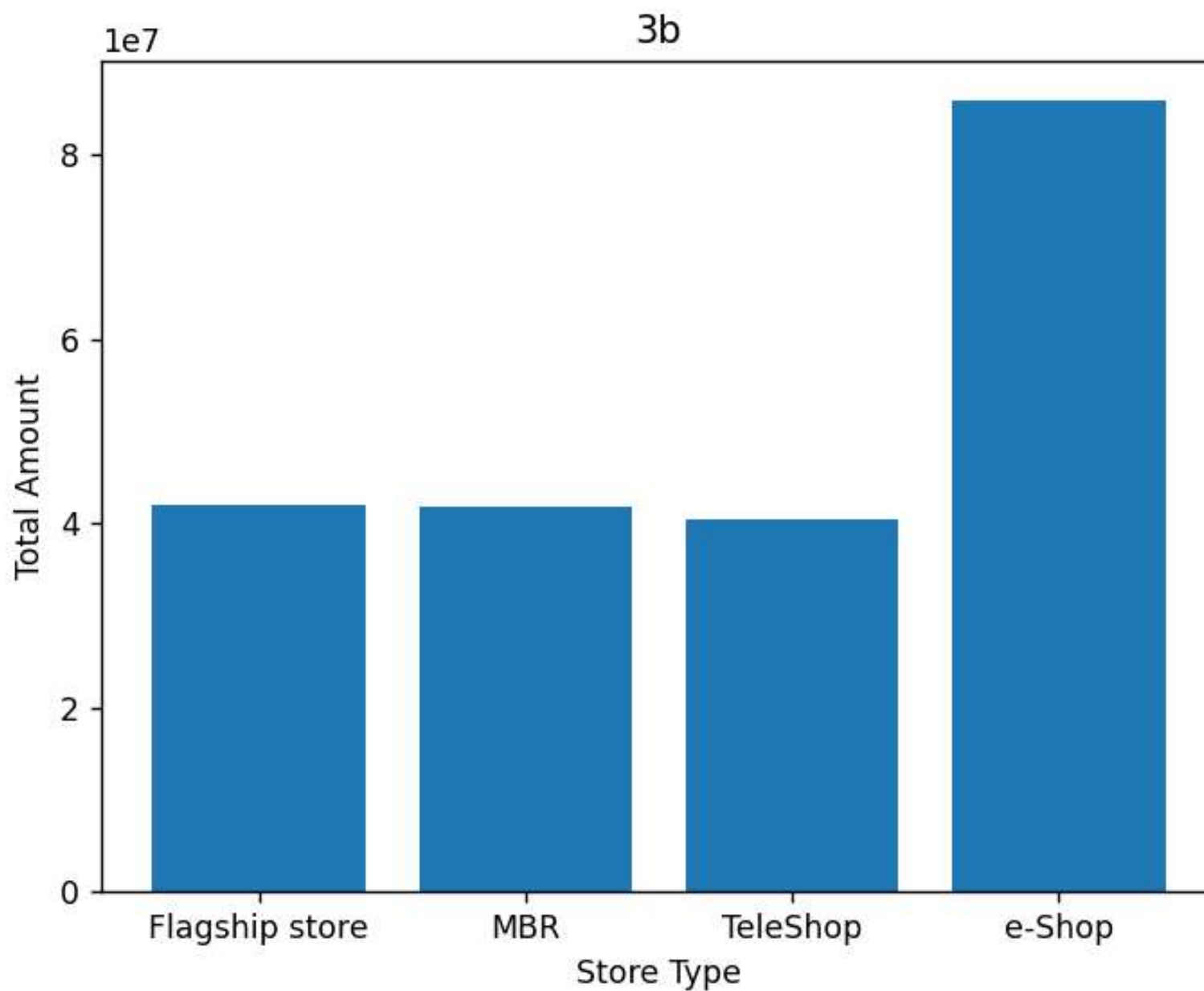




Figure 1

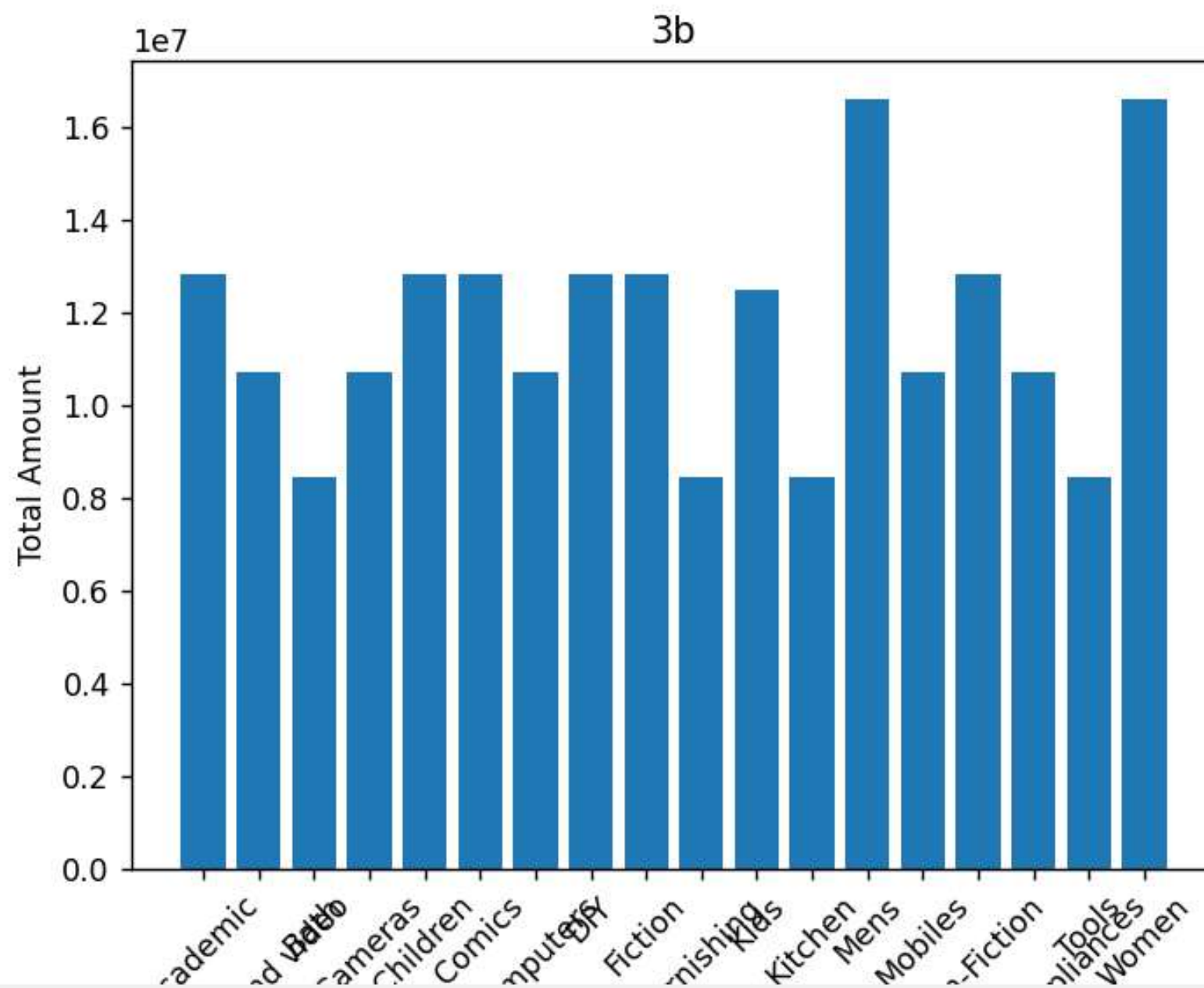
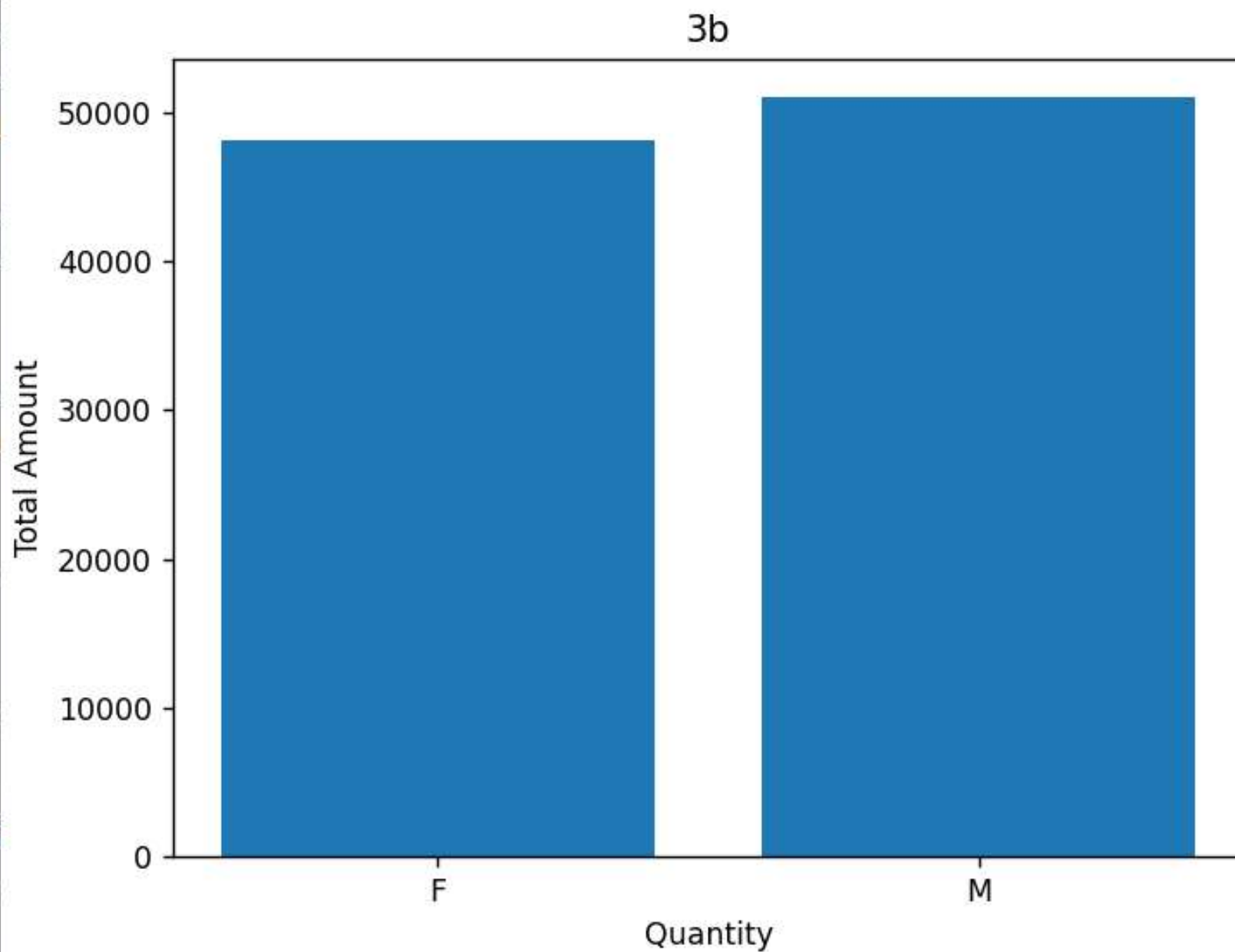


Figure 1





4a

