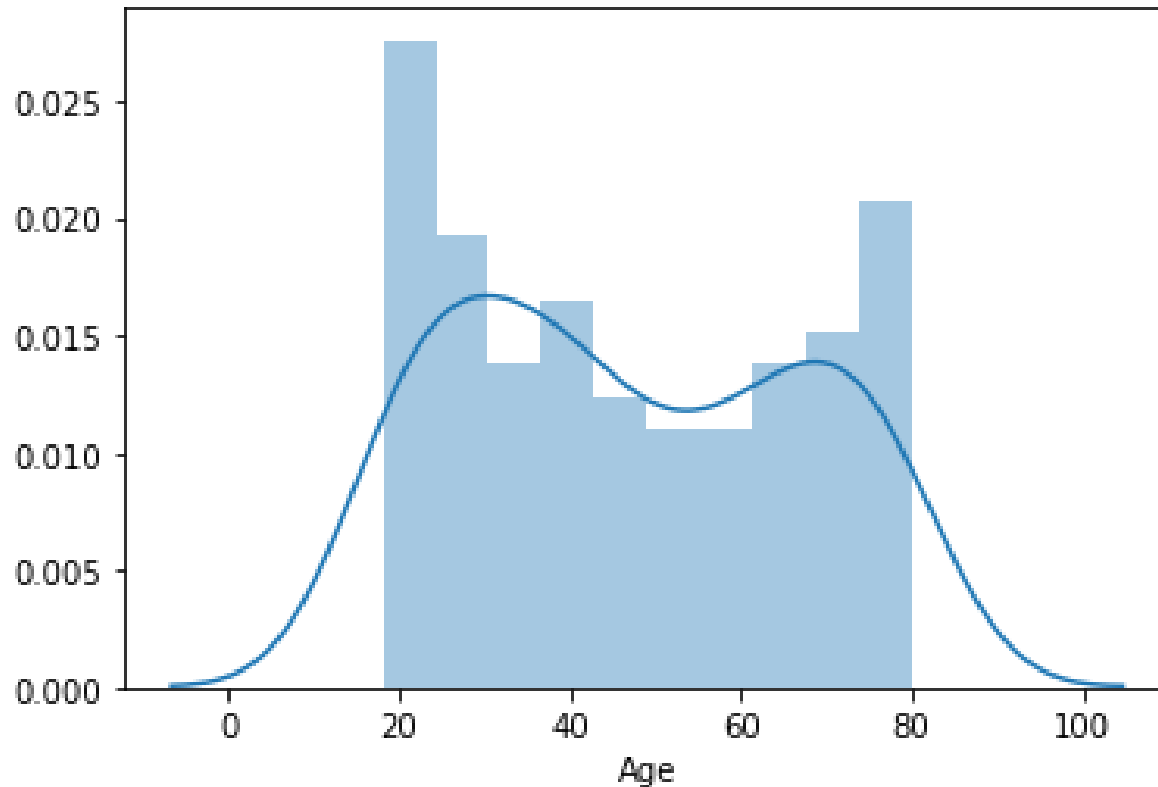# Revenue Generation

Retail Supermarket

How do I classify my premium customers?

The above histogram represents the age of the customers who have been the customers for more than 2 months and have purchased products worth more than $10000. The distribution is a bimodal distribution which shows that there have been more premium customers in the age group of around 20 to 30 years and 60 to 80 years.
These premium customers can be provided with premium benefits from the retail supermarket.

How can we categorize a customer? For which category of customers can we see some scope to increase their monthly spend?
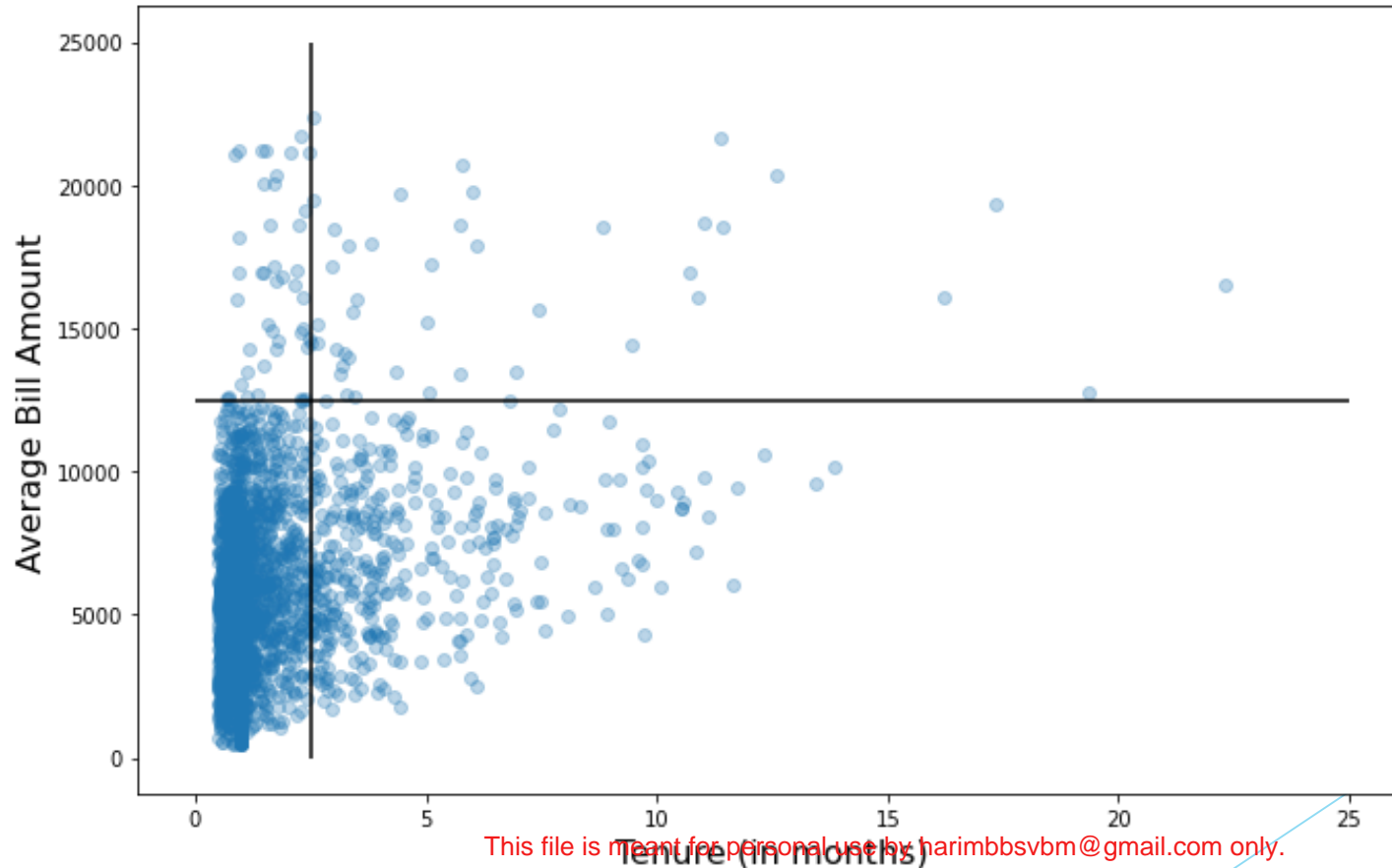
As we can see from the plot, there are high density of customers who have been customers comparatively for less than 2.5 months and generating less than approximately $12500 in average bill amount. Similarly, we can map the customers into 4 different clusters as follows:

| Average Bill Amount($)	Tenure (in months)	Number of Customers	Cluster
<=12500	<=2.5	2494	New customers with low revenue generation
<=12500	>2.5	352	Old customers with low revenue generation
>12500	>2.5	43	Old customers with high revenue generation
>12500	<=2.5	42	New customers with high revenue generation

Here, we can check the scope of introducing offers/discounts for customers depending on the clusters they belong to. Each cluster can also be further analyzed individually to find out the buying behaviors of the customers within that cluster.

What impact the current level of discounts have on our revenue generation?
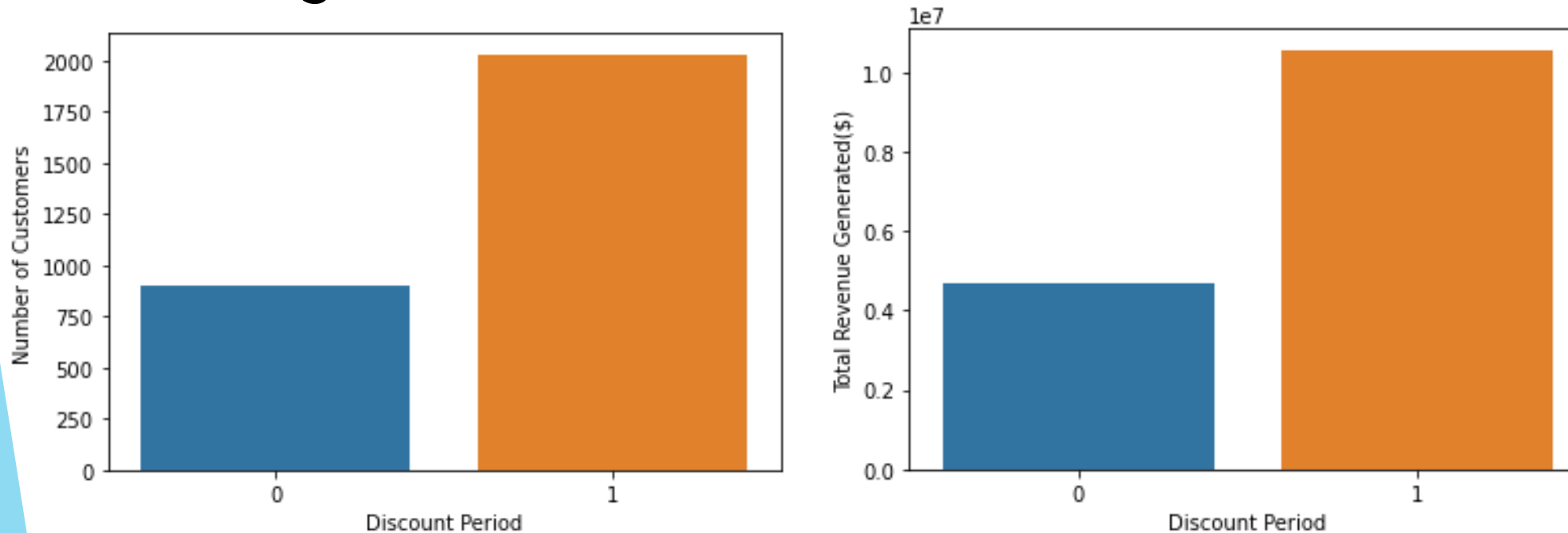
So, from the above 2 plots, we can see that clearly as the footfall is higher during the Discount Period, the revenue generation during this period also increases.

Do we need to provide preferential treatment to customers belonging to cities from any specific Tier?
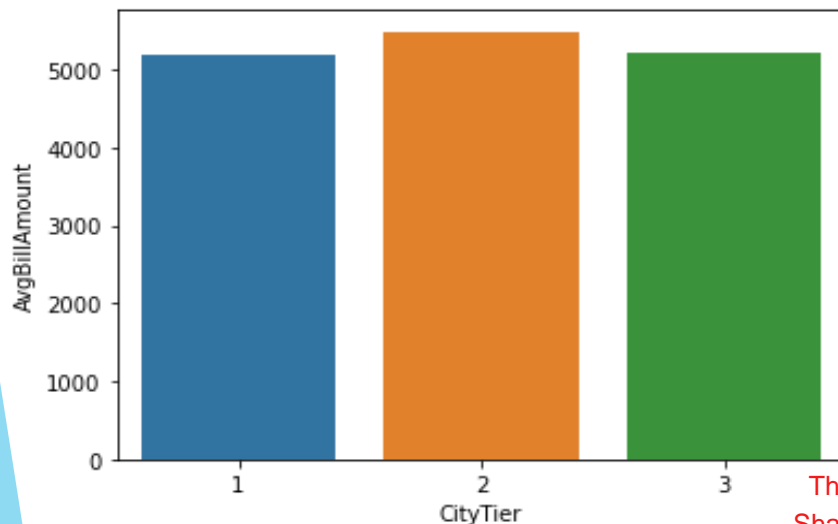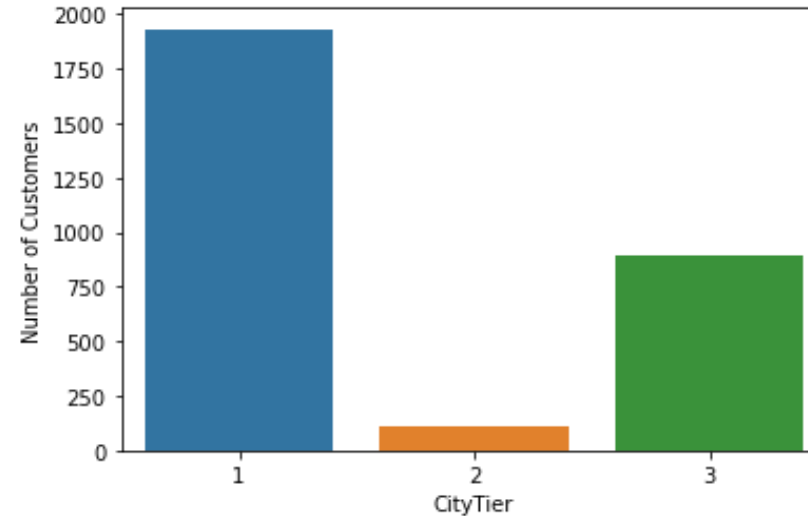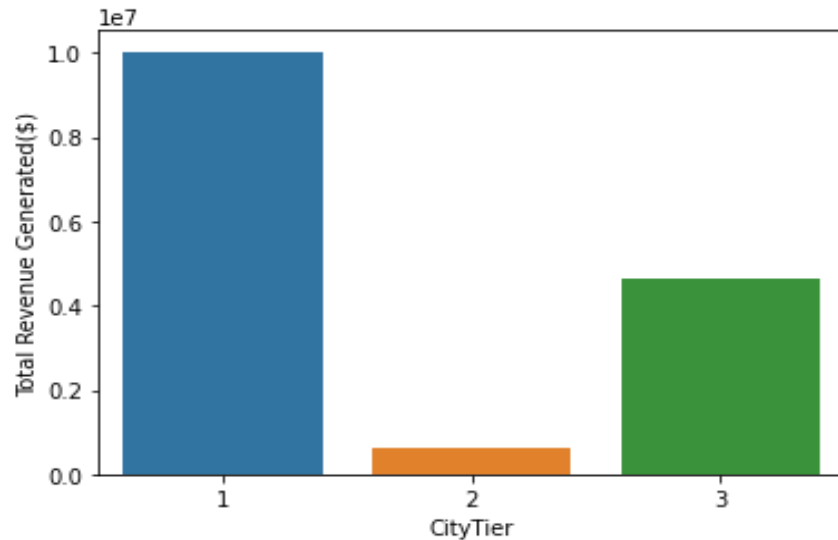
As we can see from the plots, most number of customers belong to tier 1 cities, so revenue generation from such cities is quite good. But, on an average, the buying capacity of customers belonging to tier 2 cities is slightly higher. So, some sort of marketing campaign to increase the visibility of the supermarket in tier 2 cities could increase the footfall of the customers. Moreover, there is a scope of introducing a preferential treatment/discounts to customers belonging to tier 3 cities in order to increase their footfall.

Can we tailor our discounts to the payment mode preferred by our customers across different tiers?

PreferredPaymentMode	COD	Credit Card	Debit Card	E wallet	UPI
CityTier					
1	185	731	883	0	131
2	8	26	26	0	49
3	69	177	303	313	30

45.75 % of customers prefer Debit card as preferred payment option in Tier 1 cities.
44.95 % of customers prefer UPI as preferred payment option in Tier 2 cities.
35.09 % of customers prefer E wallet as preferred payment option in Tier 3 cities.
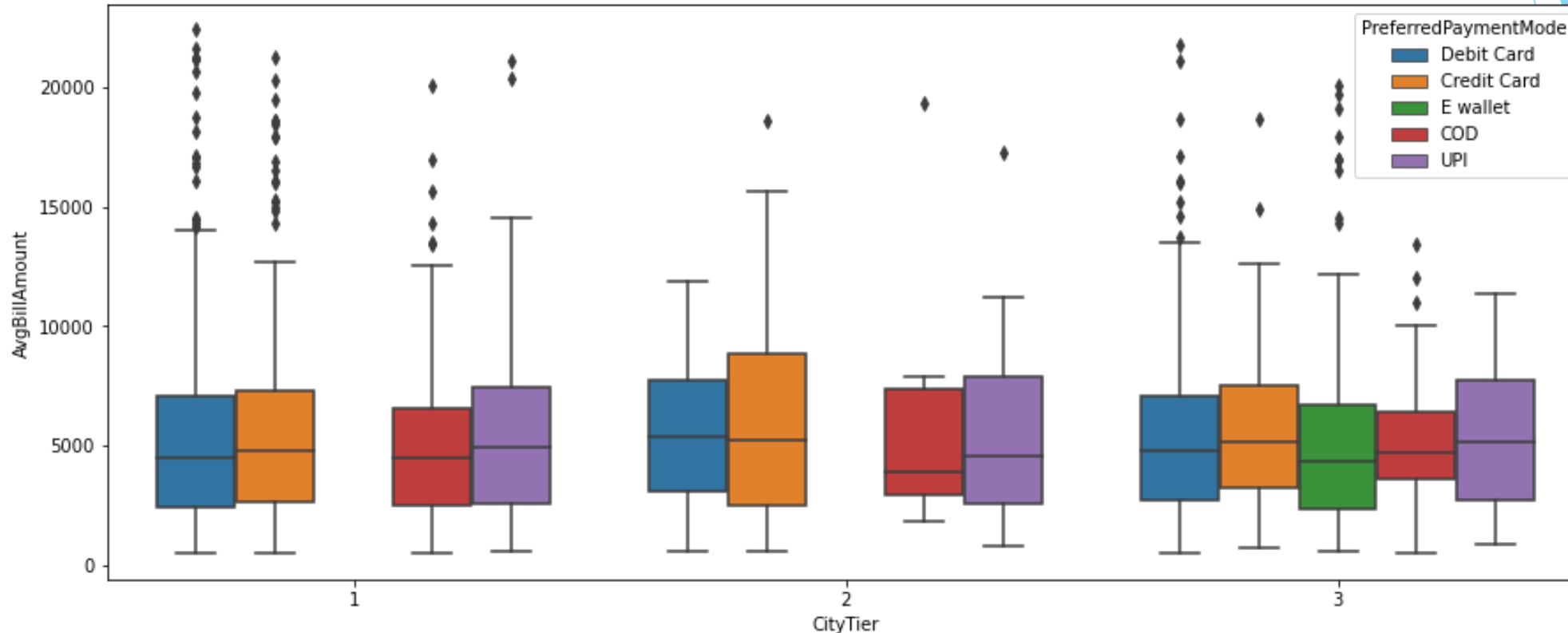
- As we can see, E wallet is used only by the tier 3 city customers. And most of the customers prefer using E wallet in tier 3 cities which is evident from the previous slide. As almost 35 % of the tier 3 city customers tend prefer E wallet as the payment method, most revenue will be generated from such customers from tier 3 cities.
- Moreover, almost 46 % of the tier 1 city customers tend prefer Debit Card as the payment method, and almost 45 % of the tier 2 city customers tend prefer UPI as the payment method, so most revenue will be generated from such customers from tier 1 & tier 2 cities.
- So, we can certainly tailor our discounts depending on the preferred mode of payment in term of cashbacks and rewards.

Do unsatisfactory customers who register complaints tend to spend less at the retail outlets?
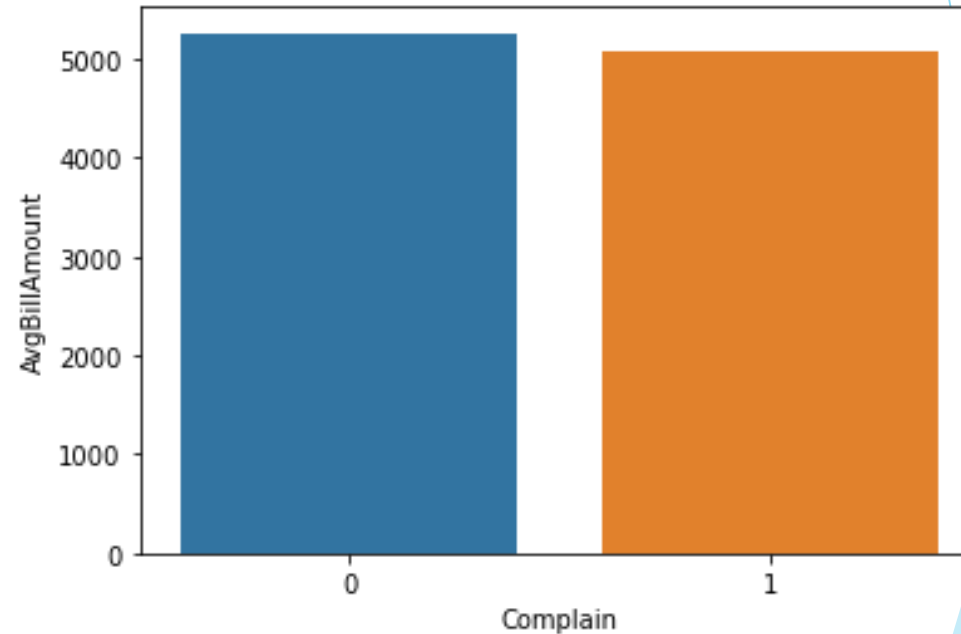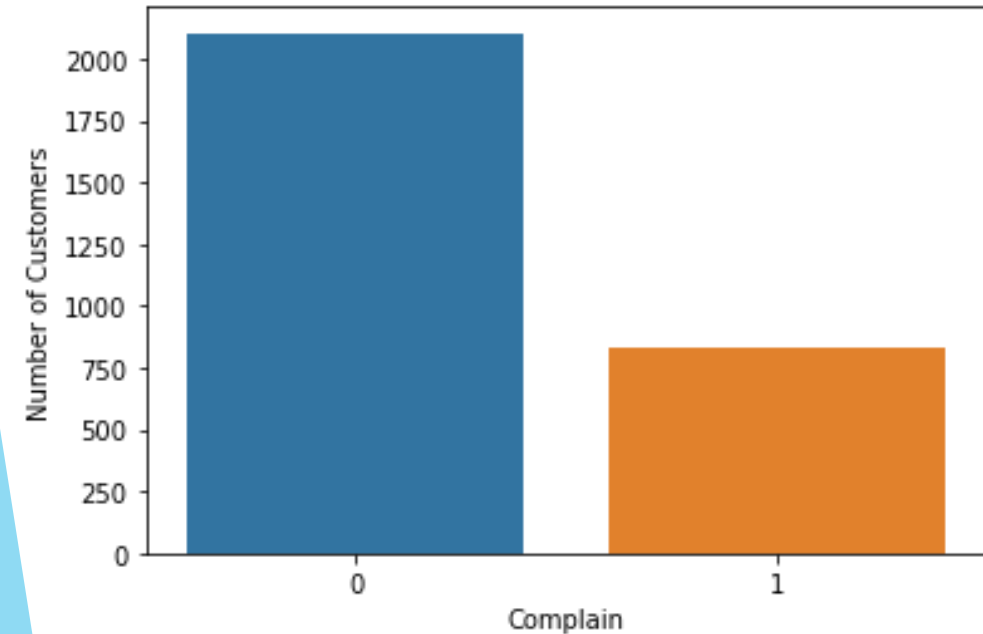
Approximately 28% of the customers have raised complaints at the retail outlets. The mean of AvgBillAmount of customers who registered a complain is more or less the same as the customers who did not register a complain. So, for further analysis, it would be a good idea to verify the output of the plots by checking how efficiently are the complaints being resolved by the support team.

How effective are the promotional counters placed on the stores?
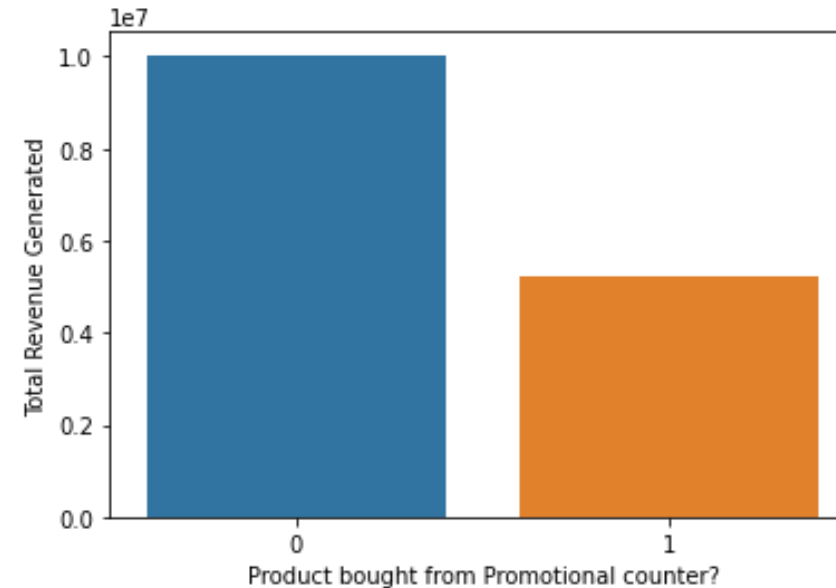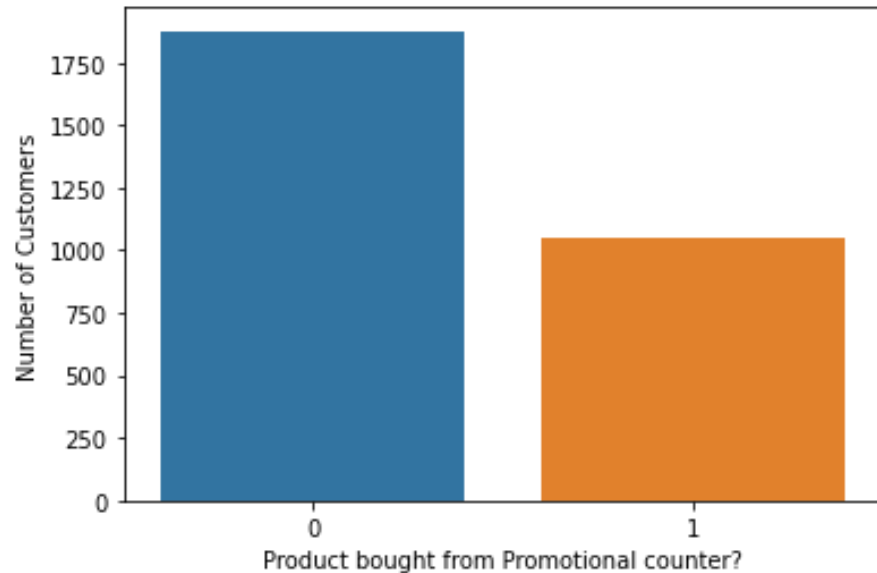
Approximately 35% of the customers tend to by products from the promotional counter which seems to contribute to around 35% of the total revenue generated.
So this looks like to be a successful initiative in generating revenue.

Do customers tend to opt for a Free Home Delivery service? How does this vary according to the city tiers?

TakenFreeDelivery	0	1
CityTier		
1	549	1381
2	24	85
3	254	638

Overall approximately 72% customers have opted for free home delivery.

71.59 % of customers opted for free home delivery in Tier 1 cities.
77.98 % of customers opted for free home delivery in Tier 2 cities.
71.52 % of customers opted for free home delivery in Tier 3 cities.

How does the customers spending vary depending on the whether the customer opts for a free delivery or not for each City Tier?
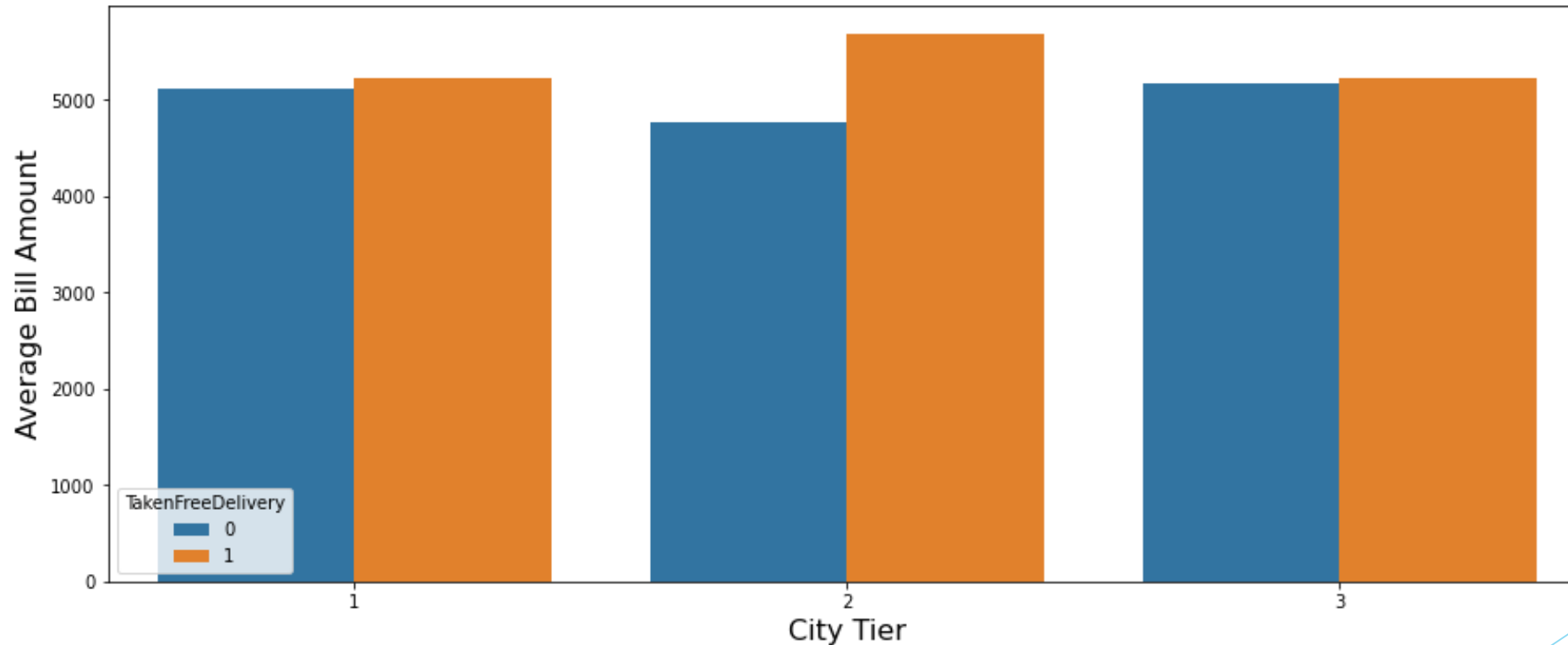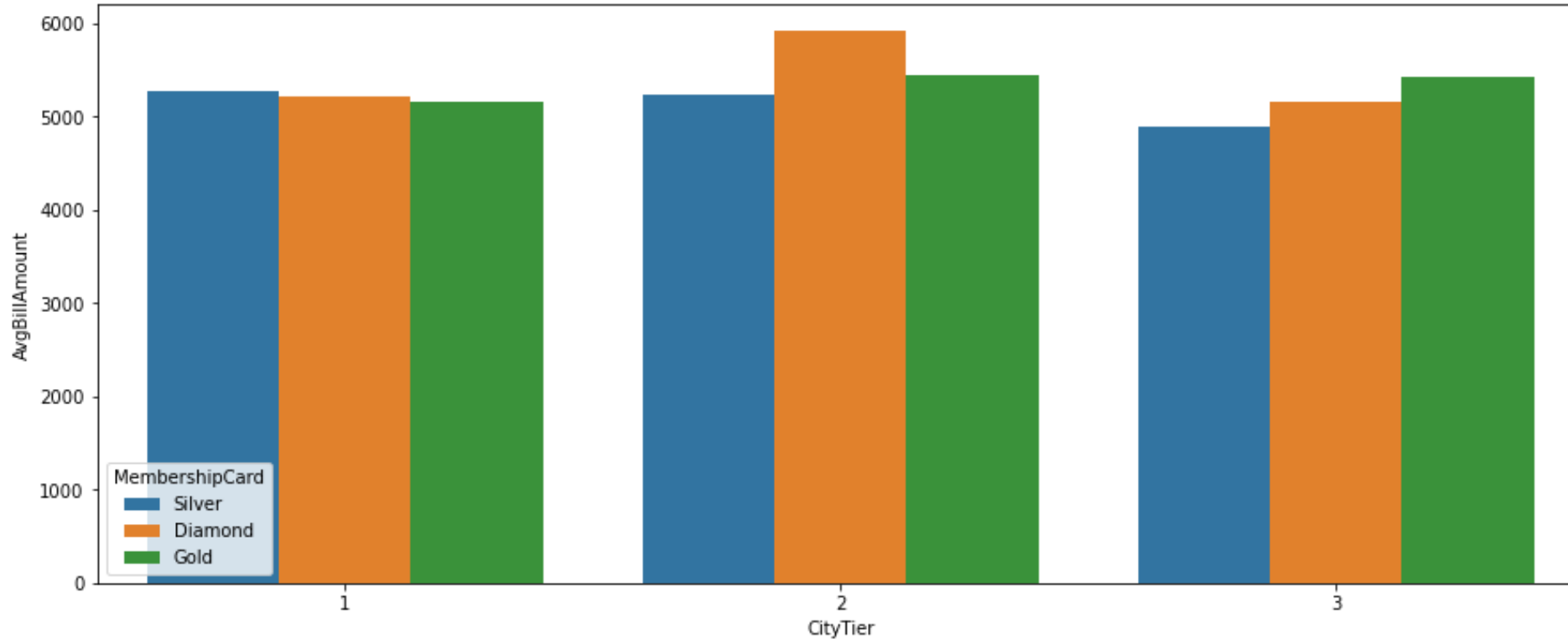

We can see that customers from tier 2 cities who opt for free home delivery spend slightly higher as compared to the ones who don't opt.

Which customers can we target to upgrade their membership for higher revenue generation?

| MembershipCard	Diamond	Gold	Silver
CityTier			
1	302	1015	613
2	21	61	27
3	157	439	296

51.69% of the customers hold a Gold Membership Card

There are 52.59 % of customers in Tier 1 cities who hold a Gold Membership Card.
There are 55.96 % of customers in Tier 2 cities who hold a Gold Membership Card.
There are 49.22 % of customers in Tier 3 cities who hold a Gold Membership Card.

In tier 2 cities, we can see that customers with Diamond membership card tend to generated higher bill amounts. Similarly, in tier 3 cities the customers with Gold membership card tend to generate higher bill amounts. So there is a scope of targeting the Silver membership card holders from such cities to be upgraded.

Does a satisfied customer tend to generate higher revenue?
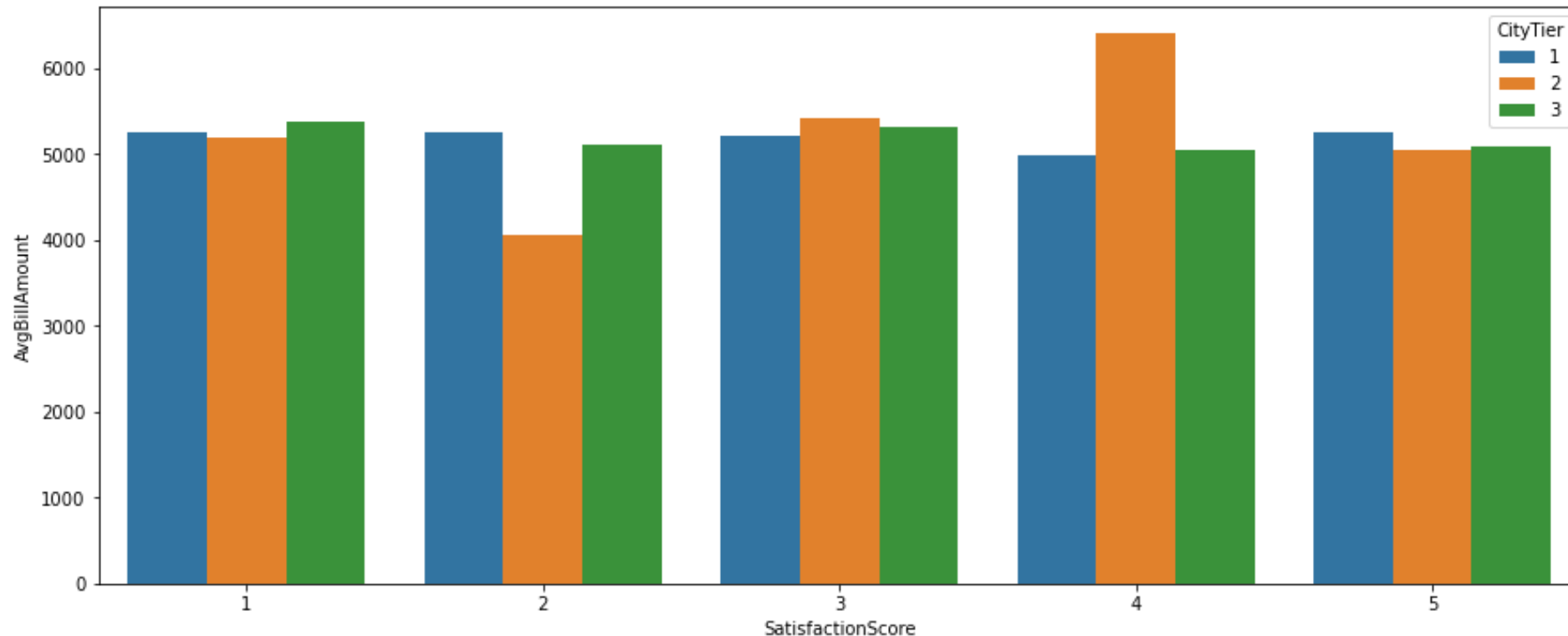
In tier 2 cities, the customers who have rated a satisfaction score of 4, tend to generate higher bill amount, but, the ones who rated a lower satisfaction score of 2, tend to generate lower bill amount.

Summary & Recommendations:

- Our focus on this case was to find out how we can increase revenue generation by analyzing a Retail Supermarket dataset.
- The premium customers lie in the age group of 20 to 30 years and 60 to 80 years.
- There is a higher revenue generation due to higher footfall during the discount period.
- We can tailor our discounts depending on the preferred mode of payment in term of cashbacks and rewards.
- Promotional counters have been quite effective in terms of revenue generation.
- Discounts can be introduced to get customers into buying more products.
- There is also some scope of upgrading the Silver or Gold card holding customers.

Thank You!
END!