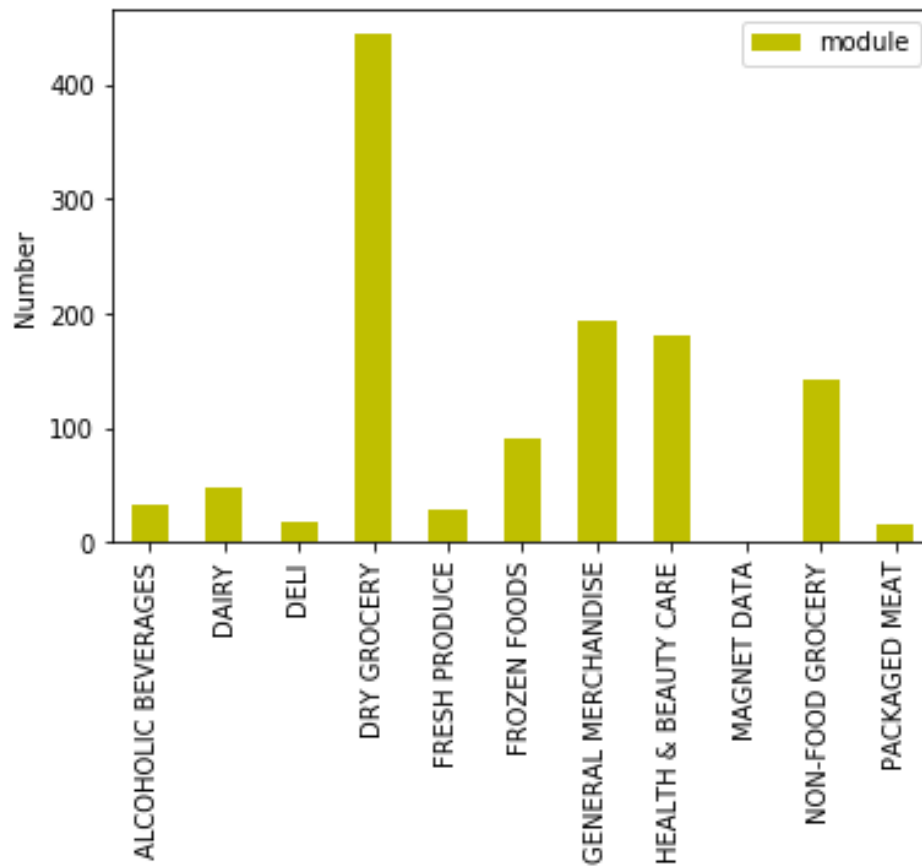
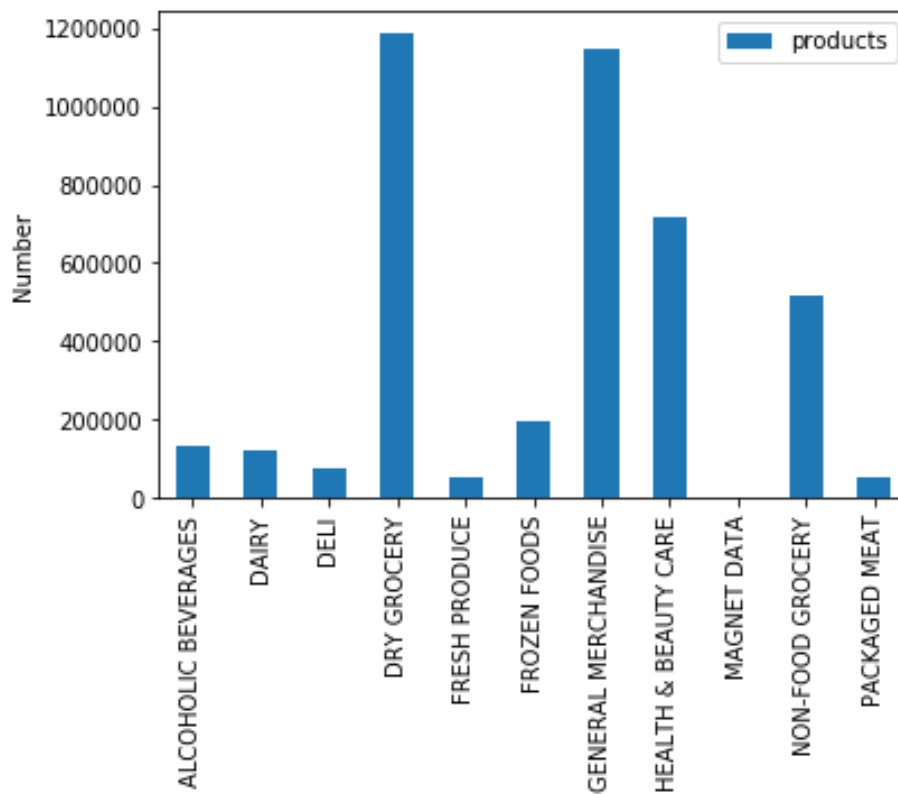


(a)

Number of modules per department

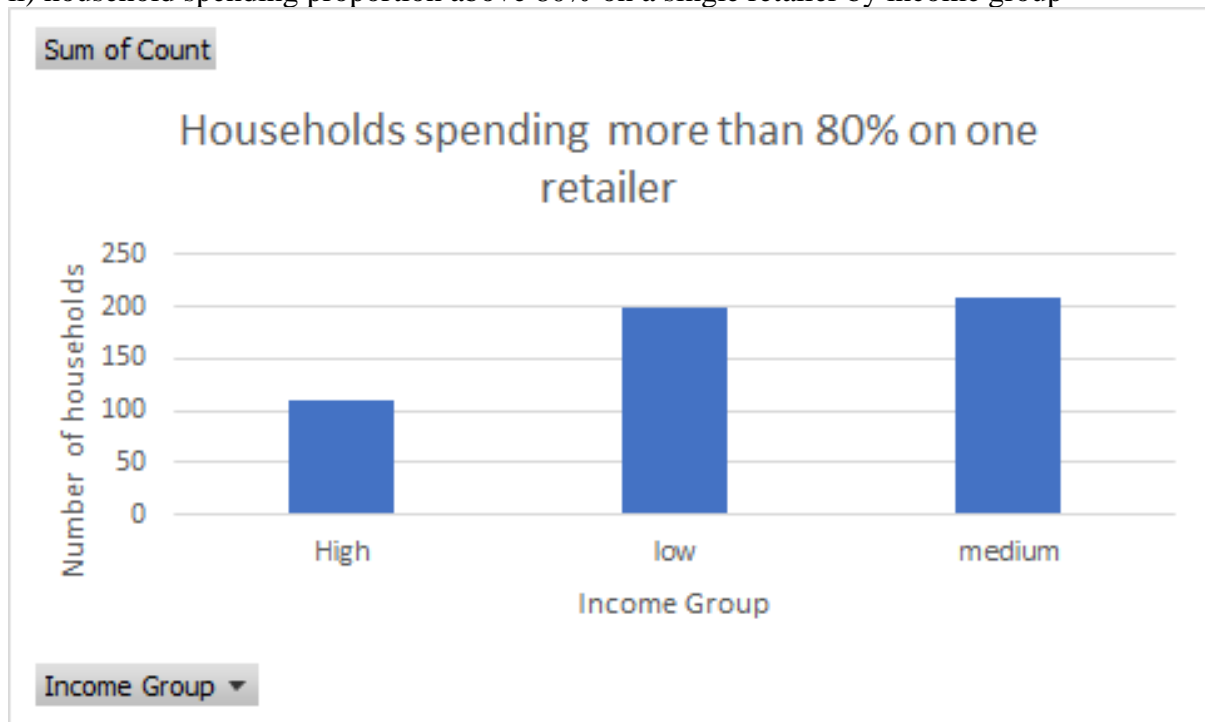


Number of products per department

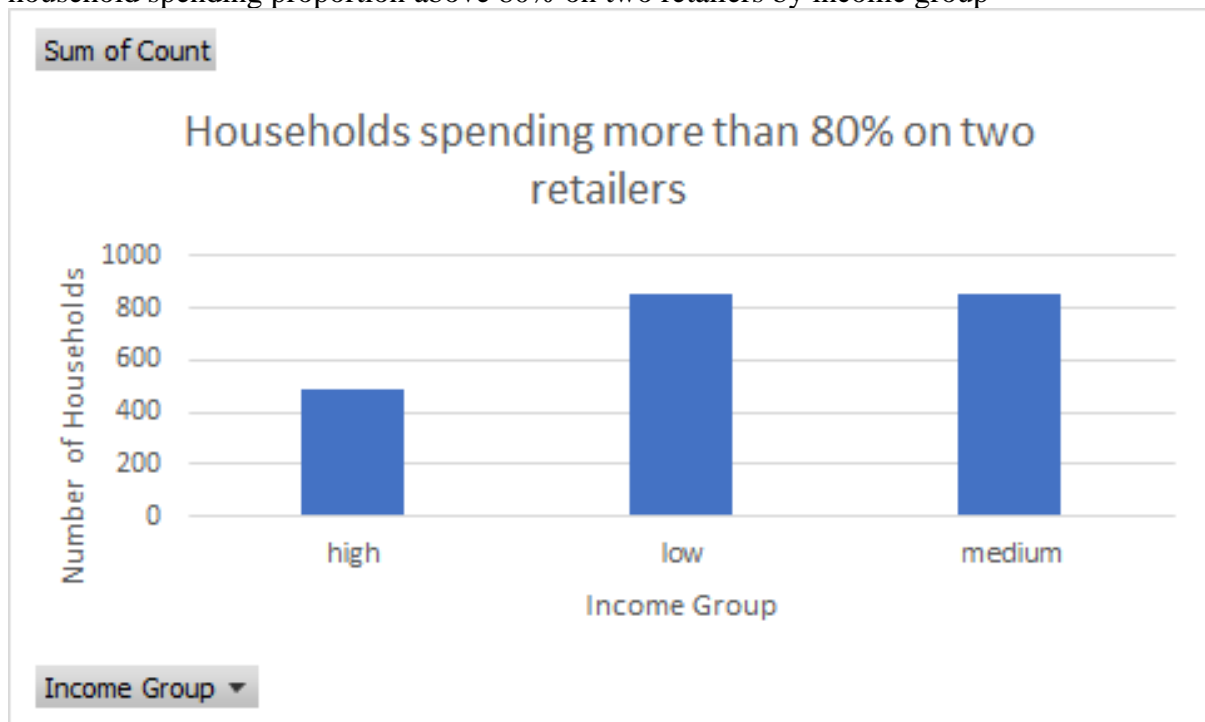


(b) Loyalism: Among the households who shop at least once a month, which % of them concentrate at least 80% of their grocery expenditure (on average) on single retailer? And among 2 retailers?

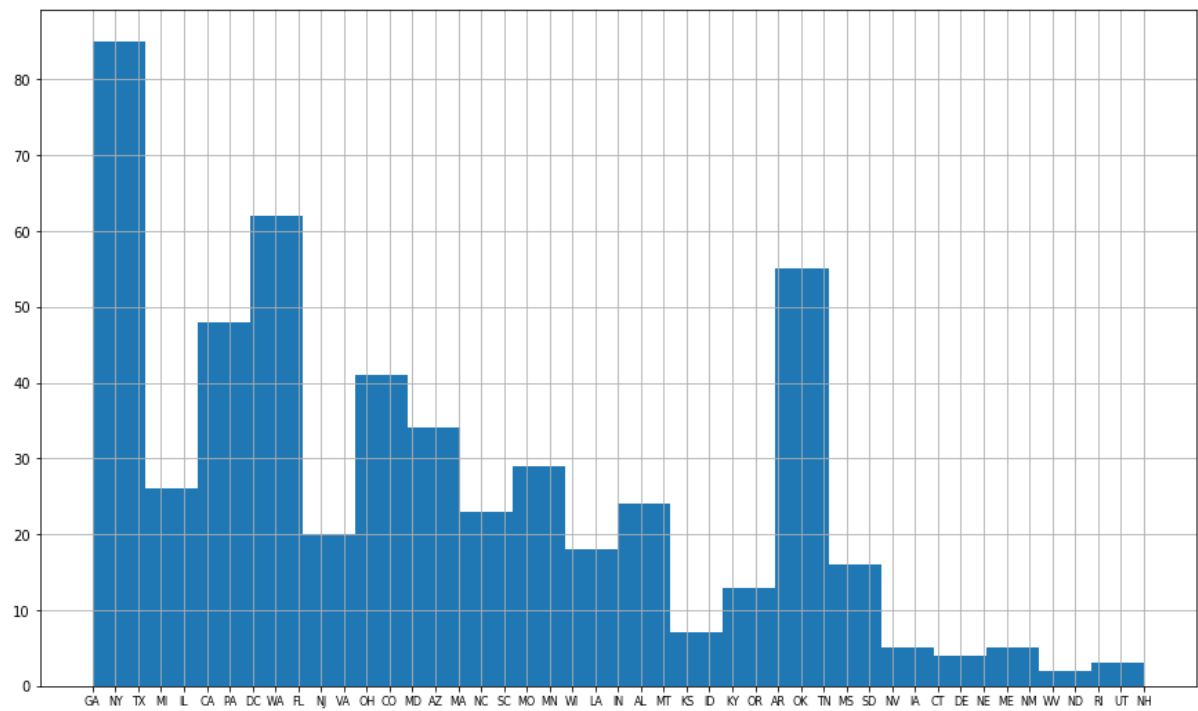
ii) household spending proportion above 80% on a single retailer by income group



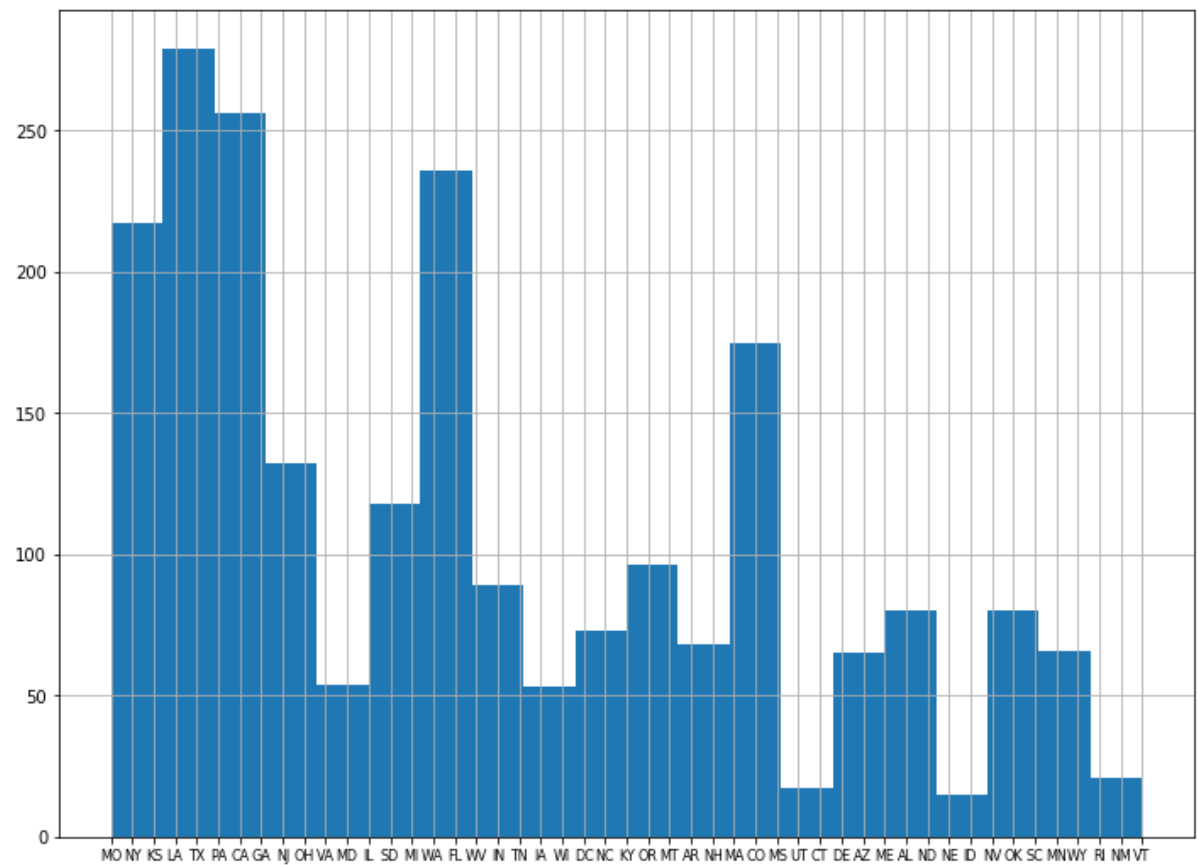
household spending proportion above 80% on two retailers by income group



Where do they live?  
Single retailer

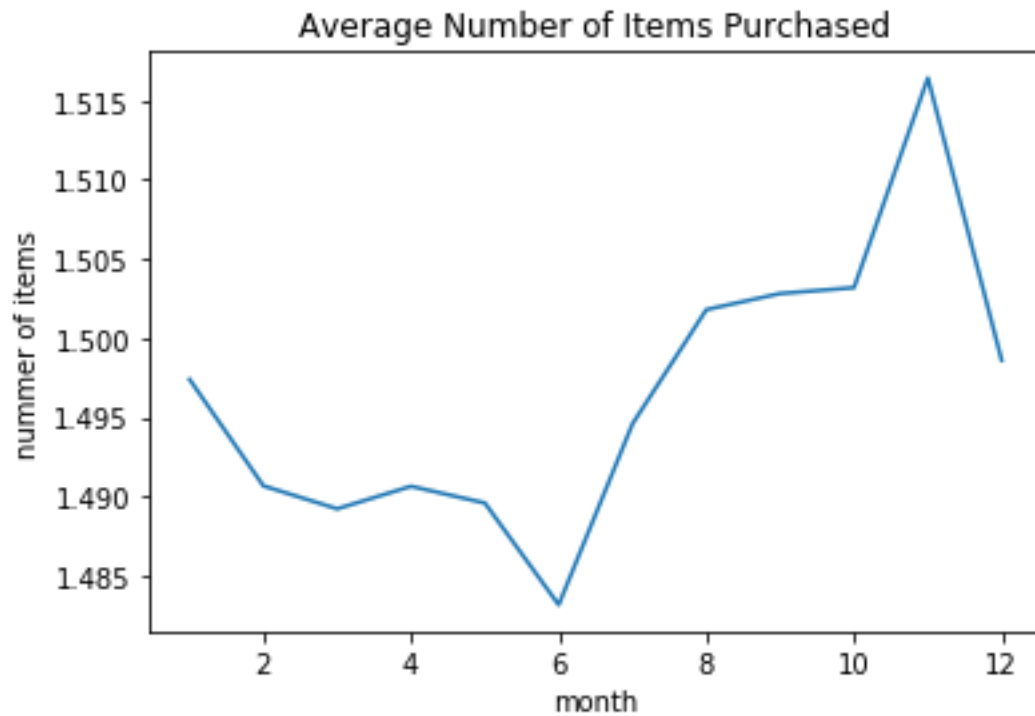


2 retailers

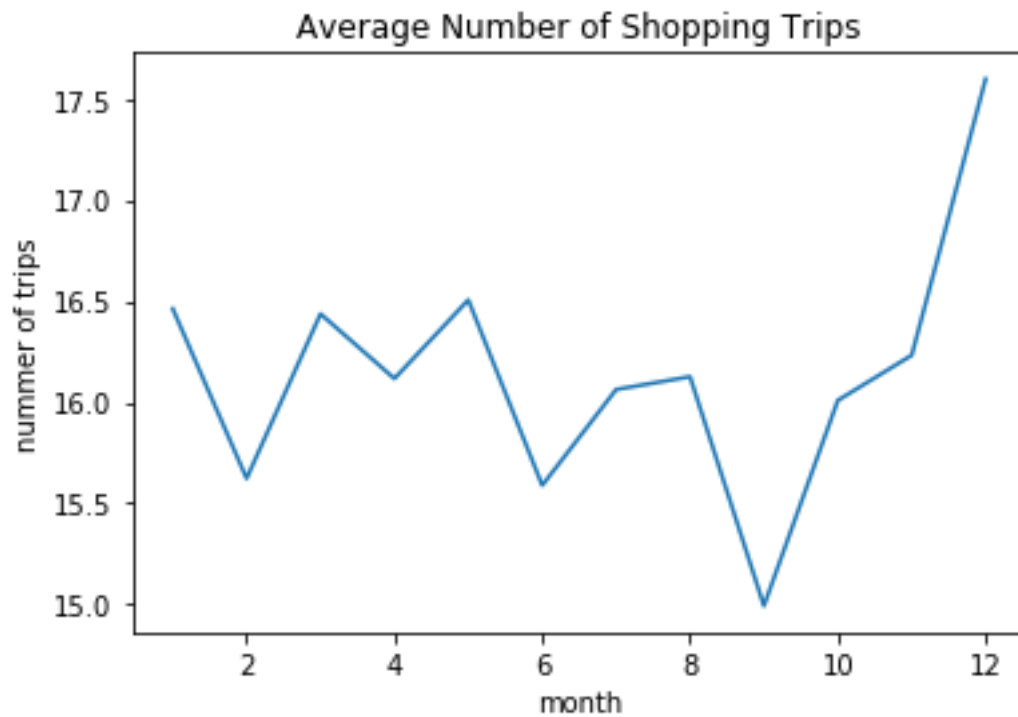


(b) Plot with the distribution

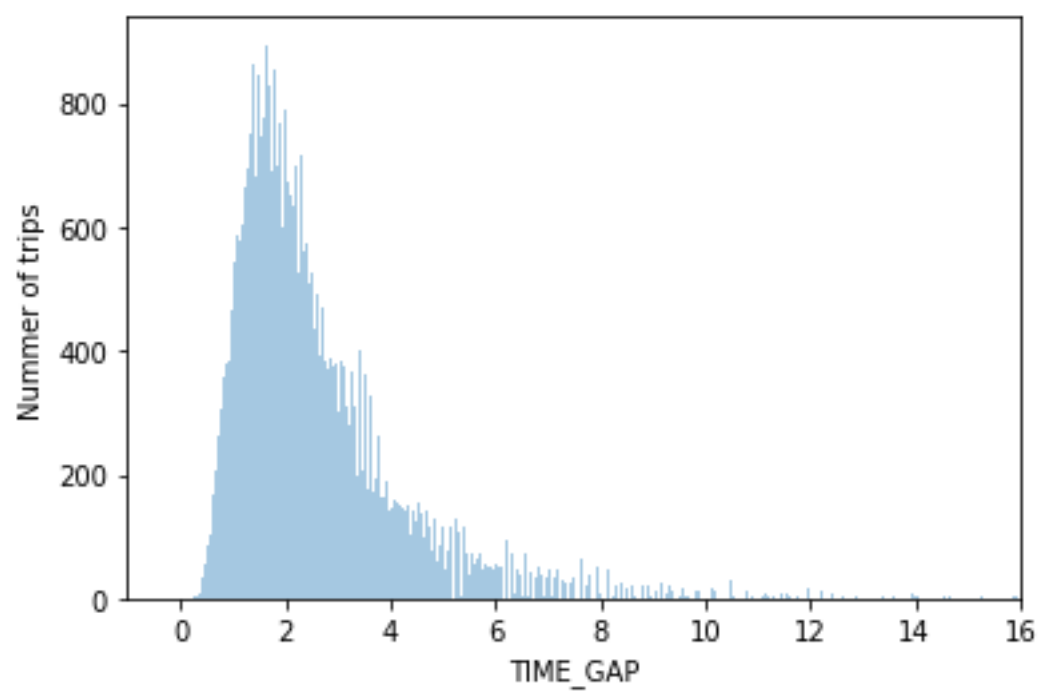
i) Average number of items purchased in a given month.



ii) Average number of shopping trips per month.

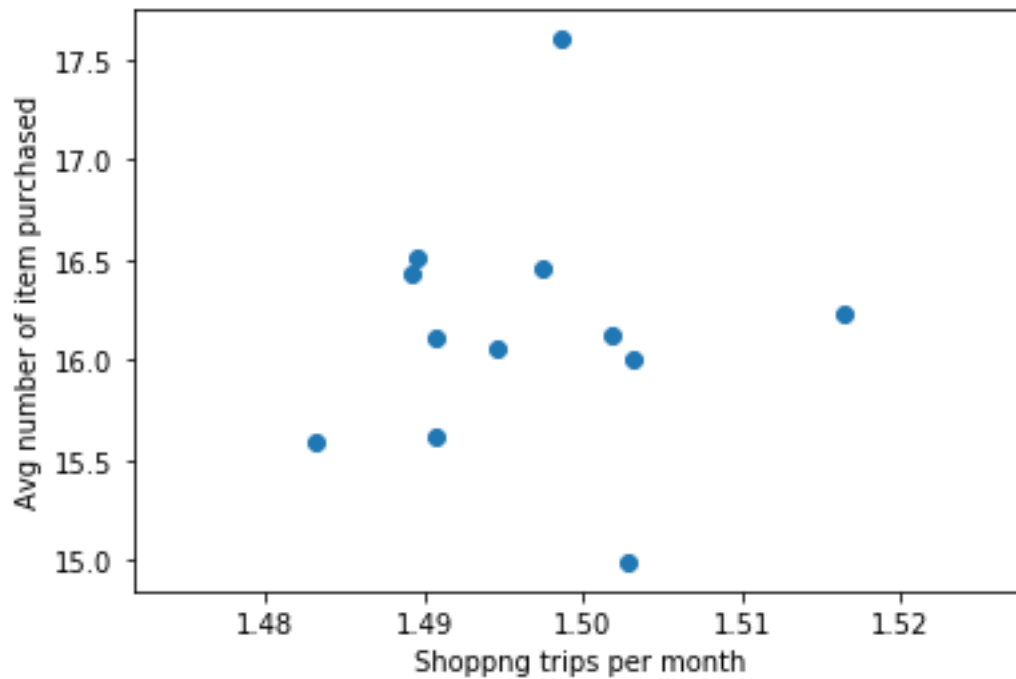


iii) Average number of days between 2 consecutive shopping trips.

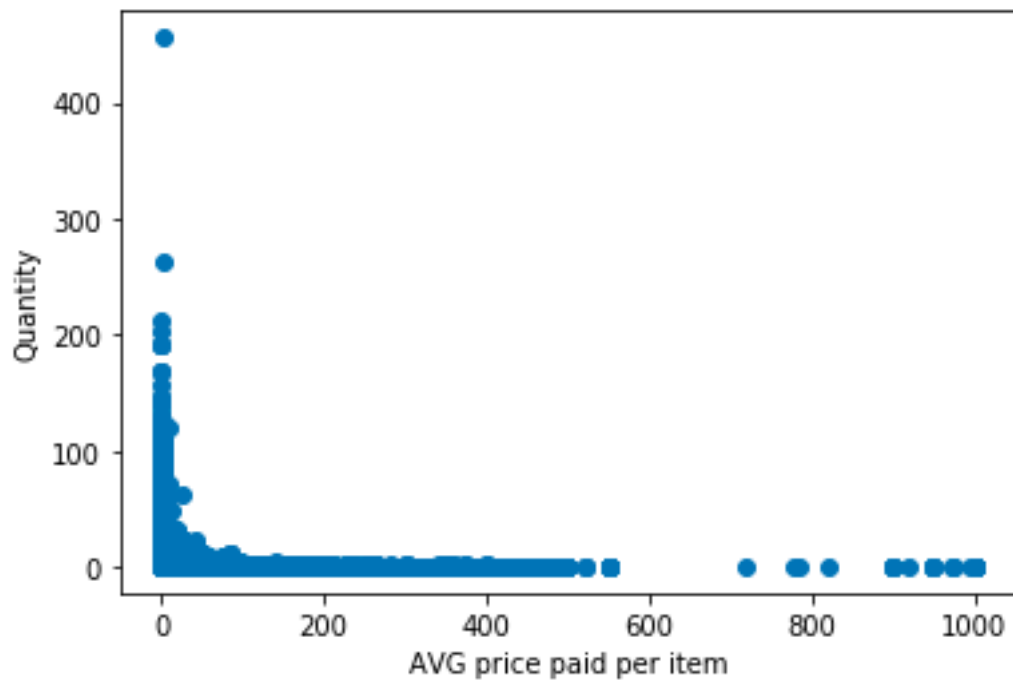


(c)

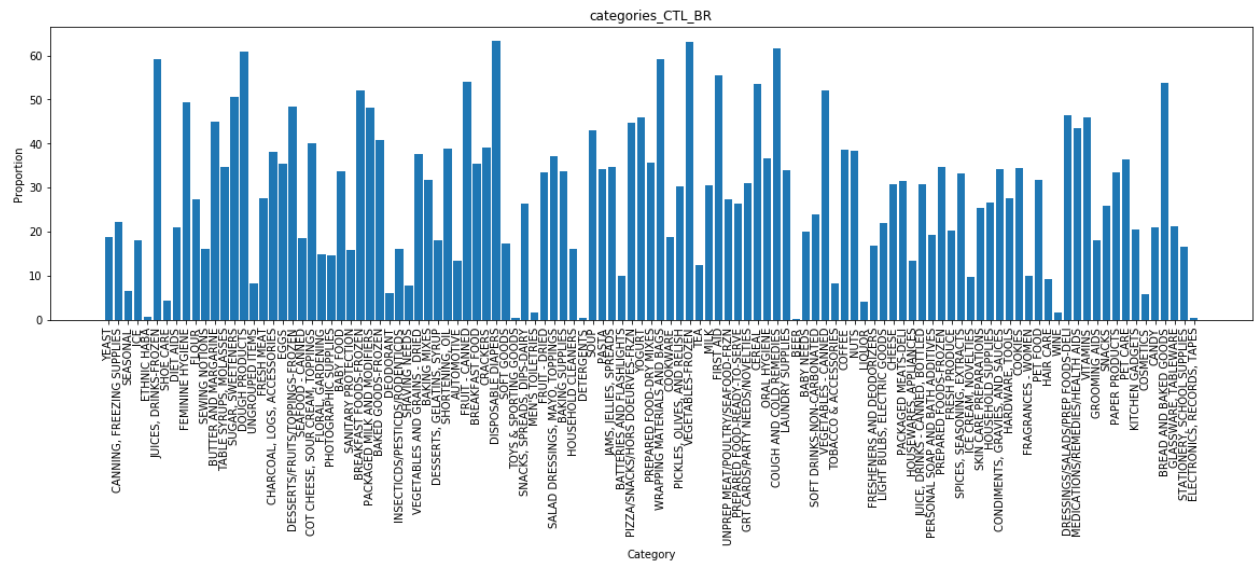
Average number of products bought per trip by number of trips per month



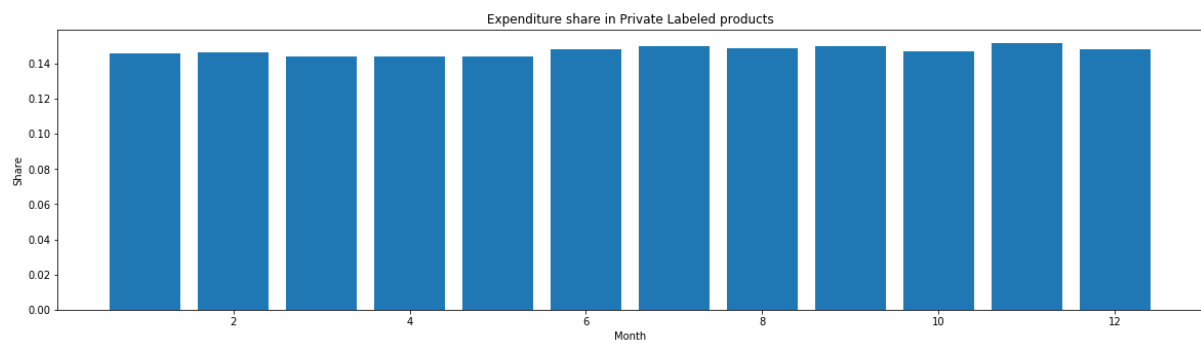
Average price paid per item against number of items



Expenditure Share in private label products by month



Is the expenditure share in Private Labeled products constant across months?



Cluster households in three income groups, Low, Medium and High. Report the average monthly expenditure on grocery. Study the % of private label share in their monthly expenditures. Use visuals to represent the intuition you are suggesting.

## Income group

