which lifestage segment is most profitable and what type premium\_customer category, exists in each category ??

* in older families with budget the products are purchased
* in young singles/couples families with mainstream category the products are purchased
* in retires families with mainstream category the products are purchased
* in young families with budget category the products are purchased
* in older singles/couples category slightly budget is preferred although all three categories are equally contributing
* in midage singles/couples mainstream budget is preferred above all
* in new families budget > mainstream > premium this is the order of prefrence

top 3 best selling products are ??

* Dorito Corn Chp
* Smiths Crnkle Chip Orgnl Big Bang 380g
* Smiths Crinkle Chips Salt & Vinegar 330g

top 10 most loyal customers are

* 226000
* 230078
* 230154
* 259009
* 179228
* 162039
* 130090
* 94185
* 63197
* 58361

each lifestage most preferred product are :\_\_\_

* midage singles/couples :- cheezels cheese 330g, Smiths crnkle chip orgnl big bag 380g, Doritos Corn Chips Cheese Supreme 170g
* new families:- Doritos Corn Chips Cheese Supreme 170g
* Older families:- Doritos Corn Chips Cheese Supreme 170g, Kettle Ssea Salt and Vinegar 175g
* Older Singles/Couples:- Doritos Corn Chips Cheese Supreme 170g, Smiths crnkle chip orgnl big bag 380g
* Retires:- Doritos Corn Chips Cheese Supreme 170g, Kettle Sweet Chilli and Sour Cream 175g
* Young Families:- Doritos Corn Chips Cheese Supreme 170g, Smiths crnkle chip orgnl big bag 380g, cheezels cheese 330g
* Young Singles/Couples:-  Doritos Corn Chips Cheese Supreme 170g, Kettle Sweet Chilli and Sour Cream 175g,  Smiths crnkle chip orgnl big bag 380g

most popular product in customer\_premium category is Dorito Corn Chp Supreme 380g

(the below questions are answered through table in the ipynb notebook)

peak sales of product

Store with the Highest Number of Products Sold:

Best selling product in each store

Total Products Bought per Loyal Customer

loyal customers exists only in Older and young families, where older consist of both singles and couples both

distribution of loyal customers on various stores

STORE\_NBR Transaction\_Count

0 230 31

1 162 18

2 179 16

3 94 16

4 63 15

5 259 15

6 130 14

7 58 14

8 226 2