

## Model : K-means Clustering

#NUMBER\_CLUSTERS = 7

```
CREATE MODEL `bads7105-313104.Supermarketdata.Supermarketdata_CLUSTERS7`
```

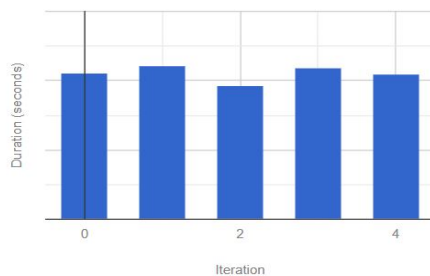
```
OPTIONS( MODEL_TYPE='KMEANS',NUM_CLUSTERS=7,KMEANS_INIT_METHOD='RANDOM')
```

```
AS SELECT*FROM `bads7105-313104.Supermarketdata.Supermarketdata`
```

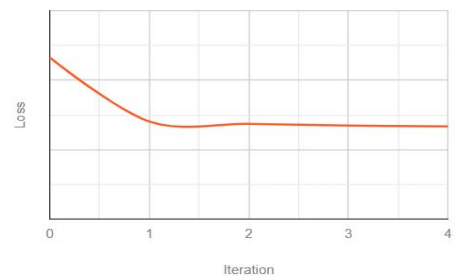
### Result :

Iteration	Training Data Loss	Duration (seconds)	Cluster Centroid Id	Cluster Radius
4	13.3460	10.47	1	3.48593323
			2	3.48090924
			3	3.5755612
			4	3.50052116
			5	6.20529996
			6	3.4123286
			7	3.56375382
3	13.4729	10.94	1	3.50582445
			2	3.49085413
			3	3.5745115
			4	3.51155222
			5	5.9226082
			6	3.43973858
			7	3.57991749
2	13.7079	9.64	1	3.53710079
			2	3.52032899
			3	3.5933729
			4	3.5114554
			5	5.64718037
			6	3.50697226
			7	3.59536691
1	14.0500	11.11	1	3.57837108
			2	3.6466858
			3	3.63074521
			4	3.50453992
			5	5.45495681

Duration (seconds)



Loss



Davies–Bouldin index	3.4054
Mean squared distance	13.346

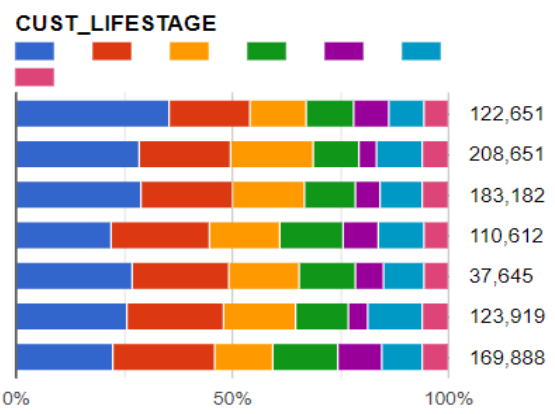
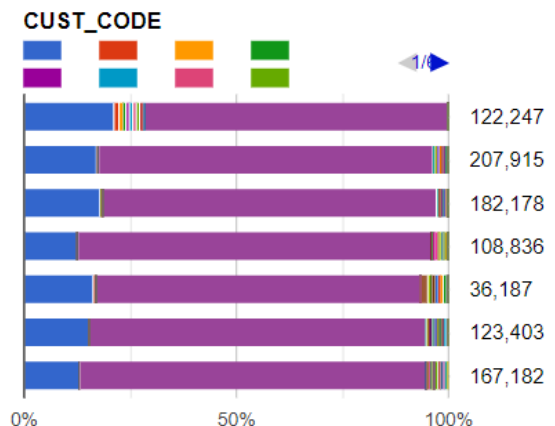
This table shows the centroid value for each feature. Use the select menu to view more numeric features.

BASKET\_ID, QUANTITY, SHOP\_DATE, SHOP\_HOUR, SHOP\_WEEK, SHOP\_WEEKD... ▼

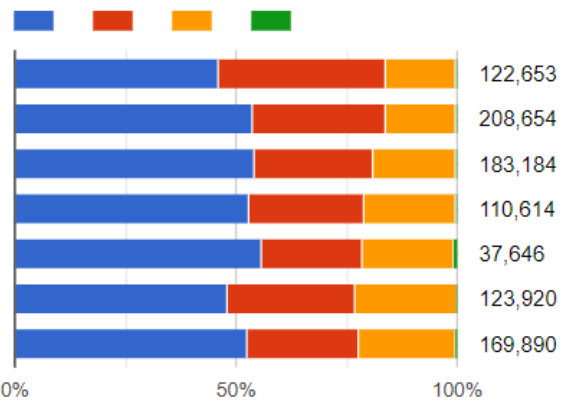
## Categorical features

Each chart below shows the category value distribution for a particular feature. Use the select menu to view more categorical features.

10 options selected



**BASKET\_PRICE\_SENSITIVITY**



**BASKET\_TYPE**

