**Recommender System Implementation Approach:**

To recommend shopper’s brands that are similar to people marked as favorites, I used the data provided about which customers favorite brand which one and, based on that, build a brand to brand affinity score, and then use it for recommendation according to highest affinity score. (i.e The higher the Affinity Score against other brand at the output, then the probability of the other brand as favorite would be high in that order.) And I have used KNearestNeighbours Algorithm for this approach which calculates the nearest Euclidean distance of different brand ids and compare with others for our expected results.

For this task I used open-source libraries of Python(Pandas, Numpy). Please find the working code in the appendix. Also, I have used a smaller data file by taking few number of records as my system was getting hanged completely with the original 90MB file, so affinity scores might have reduced because of this overall.

**Some of the example output recommendations for each brands with Affinity Scores:**





