1. **Product recommendation engine to suggest products to customers based on their browsing or purchase history.**

- **Recommendation System for Grocery Store using Python Apriori Algorithm - Machine learning**

Steps:

- ➢ **Importing libraries numpy and pandas**
- ➢ **Reading Grocery Store dataset**
- ➢ **Checking count of null values**
- ➢ **Converting data frame(df) values to list and removing header**
- ➢ **Creating new list with name "T"**
- ➢ **Appending data frame(df) values(which are in string format) to new list(T)**
- ➢ **Using if condition to remove nan values(pre-processing step)**
- ➢ **Importing apriori from apyori**
- ➢ **Setting support to 0.03(3%)**
- ➢ **Setting confidence to 0.35(35%)**
- ➢ **Lift=confidence/support (lift set to 3)**
- ➢ **Minimum length is the number of recommendation of product count.(it set to 2) this means it recommened at least 2 product**
- ➢ **This all is stored in "rule" variable**
- ➢ **Checking and analysing recommendation**

Reference:

https://www.youtube.com/watch?v=EFXeiD-jZrQ