In [1]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:
```
# load the data
# the transactions file does not have any header
# the first row is not the header but rather it is a transaction having number of pro
df = pd.read_csv('Market_Basket_Optimisation.csv', header=None)
# print(df.columns)
```

process the transactions

In [3]:
```
# collect all transactions
transactions = []

# number of transactions
rows = df.shape[0]

# fun a loop over the transactions and collect every transaction
for row in range(rows):
    # get all the columns from the row
    items = df.iloc[row, :]

    # collect all the items in a transaction
    transaction = []
    for item in items:
        if not pd.isna(item):
            transaction.append(item)

    # append the transaction to transactions
    transactions.append(transaction)
```

find the associated rules

In [4]:
```
from apyori import apriori

rules = list(apriori(transactions, min_support=0.15))
for rule in rules:
    print(rule.items)
```

```
frozenset({'chocolate'})
frozenset({'eggs'})
frozenset({'french fries'})
frozenset({'mineral water'})
frozenset({'spaghetti'})
```

In [ ]:
```
```