## 1) Eclat

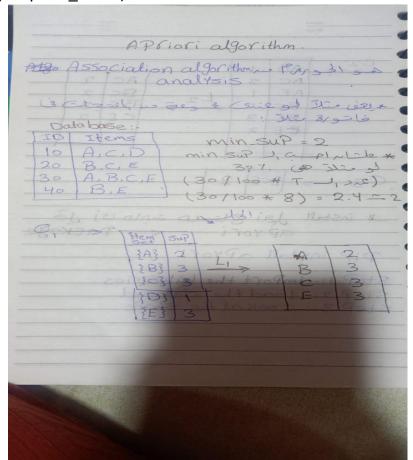
```
transactions = [['beer', 'wine', 'cheese'], ......]
import pandas as pd
data = pd.DataFrame(transactions)
data
min_n_products = 2
min support = 7/len(transactions)
max length = max([len(x) for x in transactions])
from pyECLAT import ECLAT
my eclat = ECLAT(data=data, verbose=True)
rule indices, rule supports = my eclat.fit(min support=min support,
                       min combination=min n products,
                       max combination=max length)
print(rule supports)
                        2) Apriori
import pandas as pd
dataset = [['A','C','D'], .....]
from mlxtend.preprocessing import TransactionEncoder
dst = TransactionEncoder()
                              # object from TransactionEncoder
dst ary = dst.fit(dataset).transform(dataset) # Fit data after Encoder
df = pd.DataFrame(dst_ary,columns = dst.columns_) # Make dataset in
Data Frame
print(df.head())
from mlxtend.frequent patterns import apriori
frequent items = apriori (df=df, min support=.6, use colnames = True)
print(frequent_items)
```

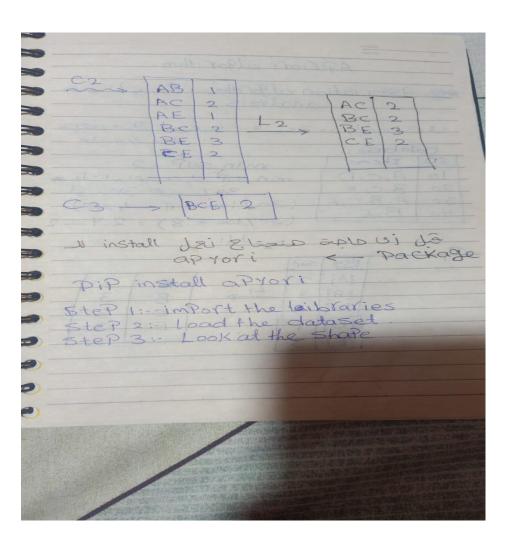
## 3) Fpgrowth

import pandas as pd
from mlxtend.preprocessing import TransactionEncoder
dst = TransactionEncoder()
dst\_ary = dst.fit(dataset).transform(dataset)
df = pd.DataFrame(dst\_ary,columns = dst.columns\_)
print(df.head())

from mlxtend.frequent\_patterns import fpgrowth
frequent\_items = fpgrowth(df=df,min\_support=.6,use\_colnames=True)

print(frequent\_items)





5)