

Using Bread Basket Dataset develop a Association Rule Mining using Apriori and FPGrowth algorithms.

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code using the Apriori algorithm

```
from mlxtend.frequent_patterns import apriori
from mlxtend.frequent_patterns import association_rules

# Load and preprocess the dataset (Step 1)

# Transform data into a binary format (Step 2)

# Apply the Apriori algorithm
frequent_itemsets = apriori(binary_data, min_support=0.05, use_colnames=True)
rules = association_rules(frequent_itemsets, metric="lift", min_threshold=0.5)

# Print the generated association rules
print(rules)
```

code using the FP-Growth algorithm:

```
import pyfpgrowth

# Load and preprocess the dataset (Step 1)

# Transform data into a transaction format (Step 2)

# Apply the FP-Growth algorithm
```

```
patterns = pyfpgrowth.find_frequent_patterns(transactions, min_support=0.05)
rules = pyfpgrowth.generate_association_rules(patterns, min_confidence=0.5)

# Print the generated association rules
print(rules)
```