

## APRIORI ALGORITHM



BY

# International School of Engineering

## We Are Applied Engineering

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# OVERVIEW

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## DEFINITION OF APRIORI ALGORITHM

- The Apriori Algorithm is an influential algorithm for mining frequent itemsets for boolean association rules.
- Apriori uses a "bottom up" approach, where frequent subsets are extended one item at a time (a step known as *candidate generation*, and groups of candidates are tested against the data.
- Apriori is designed to operate on database containing transactions (for example, collections of items bought by customers, or details of a website frequentation).

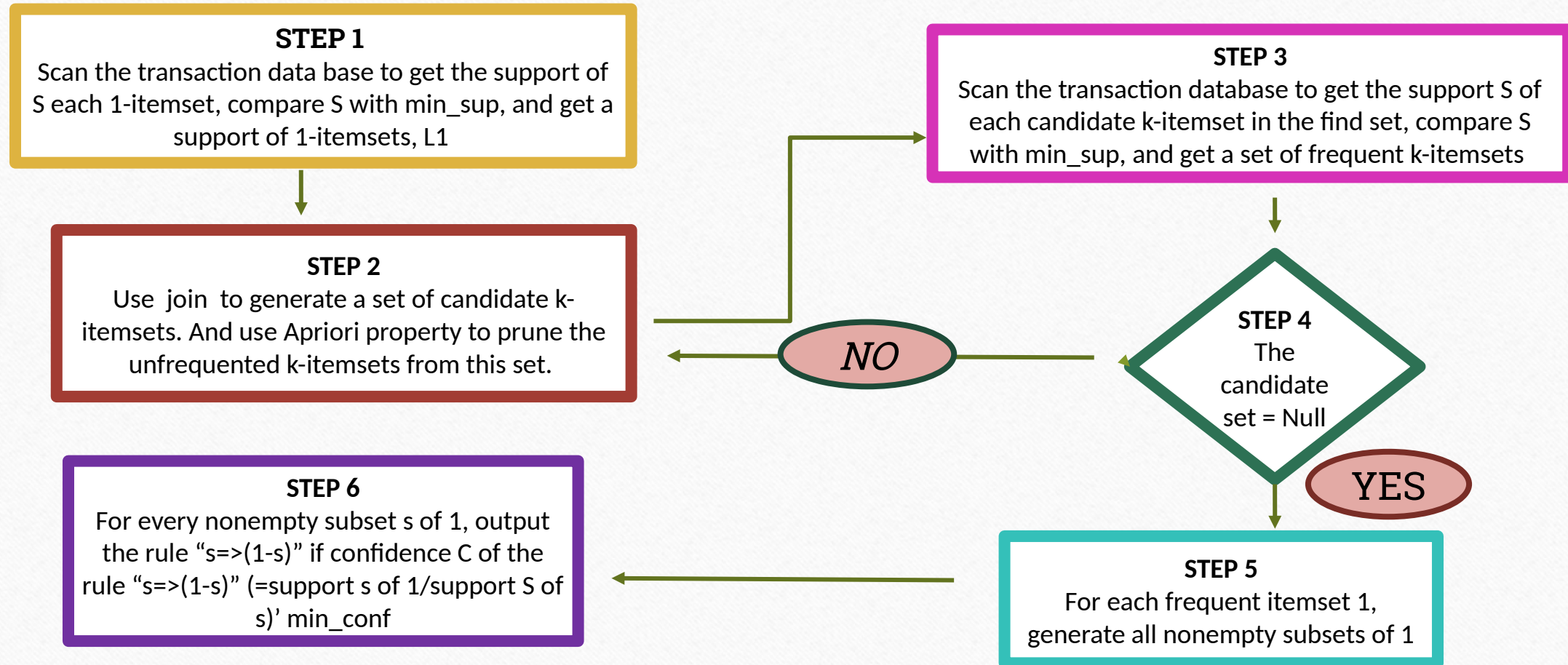


# KEY CONCEPTS

- Frequent Itemsets: All the sets which contain the item with the minimum support (denoted by  $\sigma$  for itemset).
- Apriori Property: Any subset of frequent itemset must be frequent.
- Join Operation: To find  $L_{k+1}$ , a set of candidate k-itemsets is generated by joining with itself.



# STEPS TO PERFORM APRIORI ALGORITHM



# Interesting, right?

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