Project Description:

This project aims to apply data analysis techniques to extract in-store purchasing patterns (Market Basket Analysis) using the Apriori algorithm and association rules.

Transaction data containing lists of products purchased by customers was used. After preparing the data and converting it into a suitable table, the Apriori algorithm was applied to extract frequent groups of products. Association rules were then constructed using metrics such as support and confidence to identify products that are often purchased together.

Finally, the results were presented through graphs such as parallel coordinates to illustrate the relationships between products.

The project provides a practical tool to help store owners improve product arrangement, design marketing displays, and gain a deeper understanding of customer behavior.