EX10

Deadline: Friday, Dey 27, 1403 - January 17, 2025

Question 1

Consider the following simple dataset of transactions:

Transaction ID	Items Purchased
1	Bread, Milk
2	Bread, Diaper, Beer, Eggs
3	Milk, Diaper, Beer, Cola
4	Bread, Milk, Diaper, Beer
5	Bread, Milk, Cola
6	Bread, Milk

1. Calculate the **Support Count** for individual items in the dataset.
2. Compute the **Support Count** for item combinations (e.g., Bread and Milk).
3. Generate simple association rules with antecedents and consequents (e.g., "If Bread, then Milk").
4. For one of the generated rules, calculate the **Support**, **Confidence**, and **Lift** metrics.

Question 2

In conditional imputation for missing values, which algorithms are typically used to predict the missing values?

1. Linear Regression
2. Decision Trees
3. Machine Learning-based algorithms
4. All of the above

Question 3

How does the "Iterative Imputation" method work for filling in missing data? Why might it be better compared to other methods?

Question 4

When does the Iterative Imputation method usually stop?

1. When no missing values remain in the dataset.
2. When the changes in imputed values between two iterations are less than a specified threshold.
3. When the number of iterations reaches a defined limit.
4. Options 2 and 3

Question 5

How to evaluate classification models?