

ASSIGNMENT-2

1. A database has 5 transactions. Let $\text{min_sup} = 60\%$ and $\text{min_conf} = 80\%$.

<i>TID</i>	<i>items_bought</i>
T100	{M, O, N, K, E, Y}
T200	{D, O, N, K, E, Y}
T300	{M, A, K, E}
T400	{M, U, C, K, Y}
T500	{C, O, O, K, I, E}

Find all frequent itemsets using Apriori algorithm

2. What is Market Basket Analysis? Explain Association Rules with Confidence & Support.
3. What is noise? Explain different techniques to remove noise from data.
4. What is noise? Explain data smoothing methods as noise removal technique to divide given data into bins of size 3 by bin partition (equal frequency), by bin means, by bin medians and by bin boundaries. Consider the data: 10, 2, 19, 18, 20, 18, 25, 28, 22.
5. Suppose that the data for analysis includes the attribute age. The age values for the data tuples are (in increasing order):
13, 15, 16, 16, 19, 20, 23, 29, 35, 41, 44, 53, 62, 69, 72
Use min-max normalization to transform the value 45 for age onto the range [0:0, 1:0] Use z-score normalization to transform the value 45 for age, where the standard deviation of age is 20.64 years.