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Hash Tree

Steps Involved:

1. Generation of Candidate Item sets

2. Making a hash tree based on these itemsets

3. Updating transactions to the hash tree based on support

4. Extracting Frequent Itemsets from Hashtree.

5. Rule Generation from these Frequent itemsets.

Code Details

Steps :

1. generateCandidateItemsets(F1,Fk-1)

2. T = hashTree()

3. Updatehashtree(transact,T)

4. F = extractFreqitemsets(T,support)

5. R = gen_rules(F)

Hash Tree:

1. Hash Function = h mod 3

2. Tree has three pointers: self,left,right

3. 1,4,7 are hashed to left

4. 2,5,8 are hashed to self

5. 3,6,9 are hashed to right

Frequent Set Generation

1. After Hashtree is updated, the support values are used.

2. The frequent k-itemsets are generated using the tree.

3. And the next Candidate set is generated using this set.

Rule Generation

Rules are generated by using all k-itemsets k E [1,n] and by computing the confidence of the rules.

Conclusion

This data which is mined is done through the process of Associate Rule Mining based on Hashtree technique.