

## ASSIGNMENT 3

### SET 1

1. What are the advantages of BRICH compared to other clustering method?
2. Consider the transaction database given below. Set minimum support count as 2 and minimum confidence threshold as 70%.

| Transaction ID | List of Item_Ids |
|----------------|------------------|
| T100           | I1,I2,I5         |
| T200           | I2,I4            |
| T300           | I2,I3            |
| T400           | I1,I2,I4         |
| T500           | I1,I3            |
| T600           | I2,I3            |
| T700           | I1,I3            |
| T800           | I1,I2,I3,I5      |
| T900           | I1,I2,I3         |

- a) Find the frequent item set using FP Growth Algorithm.
- b) Generate strong association rules

## SET 2

1. Explain frequent subgraph mining using Apriori method.
2. Consider the transaction database given below. Set minimum support count as 2 and minimum confidence threshold as 70%.

| Transaction ID | List of Item_Ids |
|----------------|------------------|
| T100           | I1,I2,I5         |
| T200           | I2,I4            |
| T300           | I2,I3            |
| T400           | I1,I2,I4         |
| T500           | I1,I3            |
| T600           | I2,I3            |
| T700           | I1,I3            |
| T800           | I1,I2,I3,I5      |
| T900           | I1,I2,I3         |

- a) Find the frequent itemset using Apriori Algorithm.
- b) Generate strong association rules

### SET 3

1. Explain the application of Naive Bayes Classifier in web content mining.
2. A database has five transactions. Let min sup=60% and min confidence=50%.

| Tid   | Items_bought        |
|-------|---------------------|
| T1000 | T1000 {M,O,N,K,E,Y} |
| T2000 | T2000 {D,O,N,K,E,Y} |
| T3000 | T3000 {M,A,K,E}     |
| T4000 | T4000 {M,U,C,K,Y}   |
| T5000 | T5000 {C,O,O,K,I,E} |

- a .Find all frequent patterns using FP-growth algorithm.
- b .Find all strong association rules for the above table.