**Lab Assignment 2( FP-Growth)**

1. Implement FP Growth algorithm for the given dataset. Consider the support for this 30%.

1. Find the frequent item set.
2. Compare the generated Association rules association rules generated using Apriori.

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| * TID | * List of Items ID’s |
| * T1 | * I1, I2, I5 |
| * T2 | * I2, I4 |
| * T3 | * I2, I3 |
| * T4 | * I1, I2, I4 |
| * T5 | * I1, I3 |
| * T6 | * I2, I3 |
| * T7 | * I1, I3 |
| * T8 | * I1, I2, I3, I5 |
| * T9 | * I1, I2, I3 |

2. Use “Mushroom” data set sent with Apriori algorithm. Run FP growth algorithm on the data set. Compare the run time, number of DB scans, association rules and find out the reasons for any differences in results between Apriori and FP growth.

3. Show the implementation of the FP growth algorithm using the link list and adjacency matrix. Consider the same dataset.