

- 1) Trace the results of using the FP-Tree algorithm on the grocery store example with support threshold $s=2$

Transaction ID	Items
T1	HotDogs, Buns, Ketchup
T2	HotDogs, Buns
T3	HotDogs, Coke, Chips
T4	Chips, Coke
T5	Chips, Ketchup
T6	HotDogs, Coke, Chips

- 2) Giving the following database with 5 transactions and a minimum support threshold of 60% using FP-Tree

TID	Transaction
T1	{A, B, C, D, E, F}
T2	{B, C, D, E, F, G}
T3	{A, D, E, H}
T4	{A, D, F, I, J}
T5	{B, D, E, K}

- 3) Assume the following Encoded Transaction Table

TID	Items
T1	{111, 121, 211, 221}
T2	{111, 211, 222, 323}
T3	{112, 122, 221, 411}
T4	{111, 121, 411, 221}
T5	{111, 122, 211, 221, 413}
T6	{211, 323, 411}
T7	{323, 411, 412, 313}
T8	{111, 211, 121, 313}
T9	{121, 211, 212, 311}
T10	{312, 222, 411}

T11	{112, 121, 122, 211}
T12	{221, 121, 111, 313}
T13	{221, 121, 111, 313}
T14	{111, 122, 211, 221, 413}
T15	{111, 211, 121, 313}

With minimum support 8 for level 1

Apply reduced support for level 2 (Support 6), then Uniform support for further Levels. Find all frequent itemset