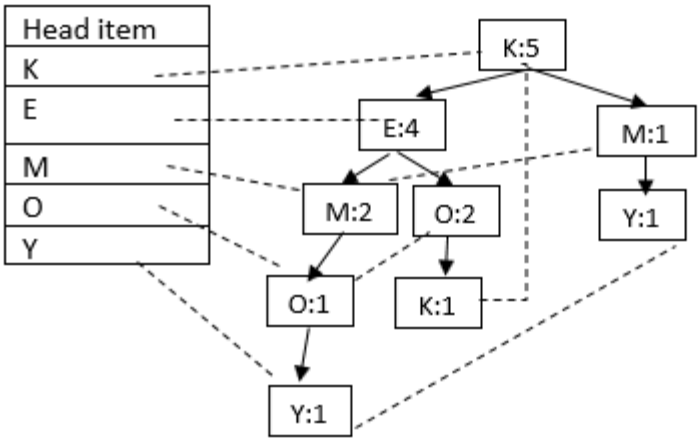
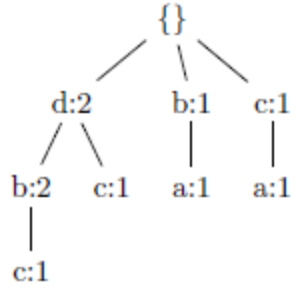
3.FP-Tree

(i)
First of all we order the frequent items according to the frequency
I' = {K:5, E:4, M:3, O:3, Y:3 }

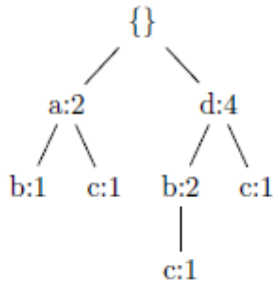
TID	ordered items
1	K,E,M,O,Y
2	K,E,O,Y
3	K,E,M
4	K,M,Y
5	K,E,O



(ii)
with t = 1 all items are frequent withe the following frequencies
I' = {d:4, b:3, c:3, a:2 }
Then we order the items in the database according to the frequency
D'={ba, ca, dbc, db, dc, d }
Now we construct the FP-Tree



The tree consists of 8 nodes without the node {}
Now if we order the database like this
D"={ba, ca, dbc, db, dc, d}
then we get the following tree



and we see that the tree with the previous heuristic consists of 7 nodes without the node {}
so ordering the items according the frequency didn't give the minimal number of nodes