4.2.5.2 FP-Tree Construct ?

Q

TID	Items bought
100	{f, a, c, d, g, i, m, p}
200	{a, b, c, f, l, m, o}
300	{b, f, h, j, o, w}
400	{b, c, k, s, p}
500	{a, f, c, e, l, p, m, n}

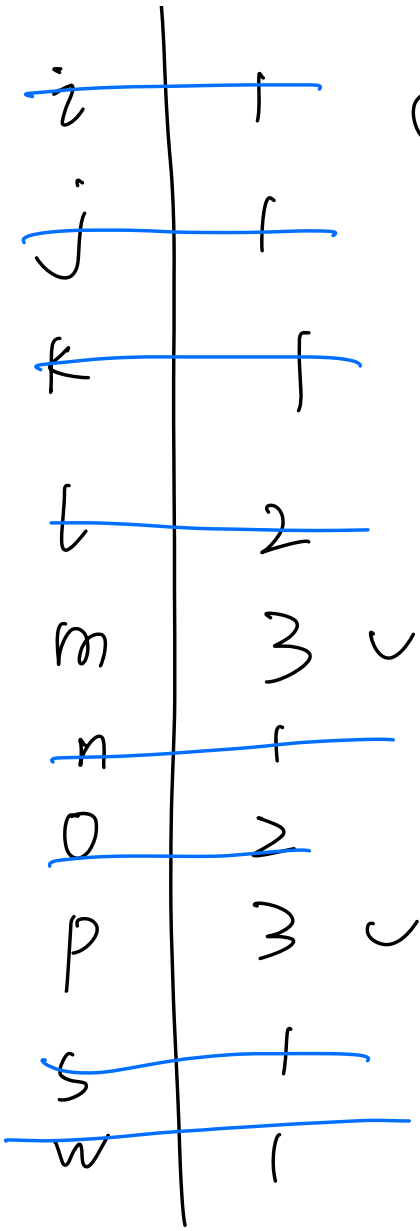
minsup=3

Solution ① Scan DB

minsup = 3

itemset	σ	
a	3	✓
b	3	✓
c	4	✓
~~d~~	~~1~~	
~~e~~	~~1~~	
f	4	✓
~~g~~	~~1~~	
~~h~~	~~1~~	

{f, a, c, d, g, i, m, p}
{a, b, c, f, l, m, o}
{b, f, h, j, o, w}
{b, c, k, s, p}
{a, f, c, e, l, p, m, n}



② Sorted list

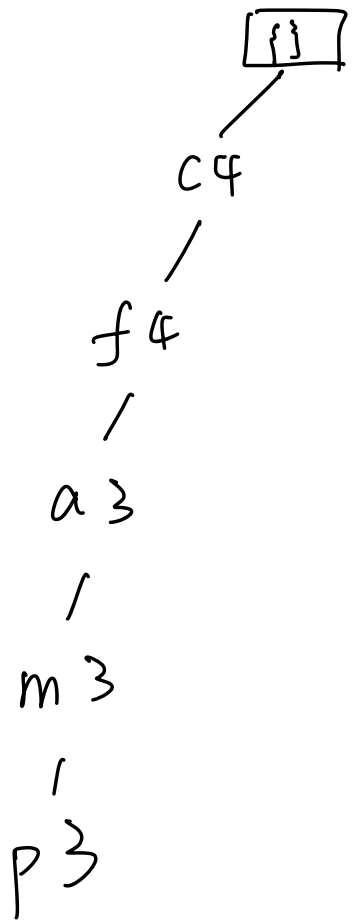
itemset	σ
c	4
f	4
a	3
b	3
m	3
p	3

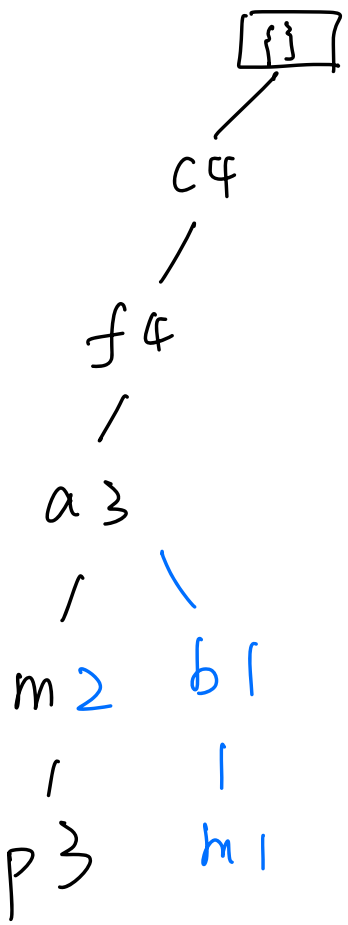
② sort frequent items in frequency descending order, F-list

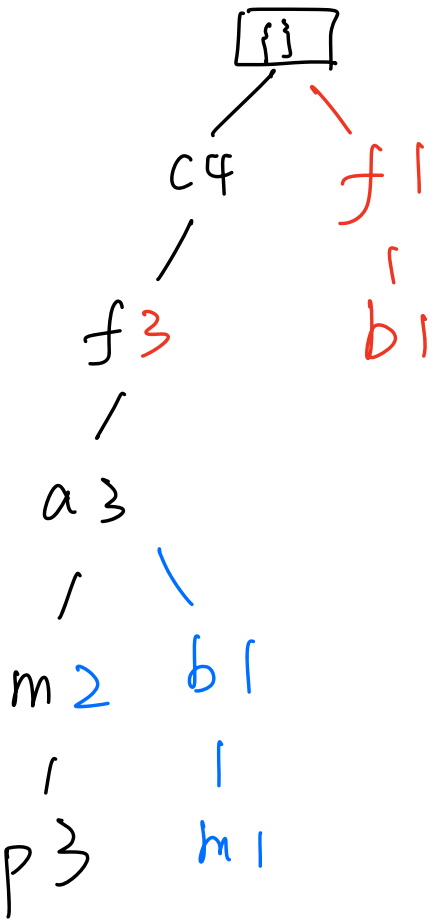
Sort can not follow Alphabeta order but we recommend it.

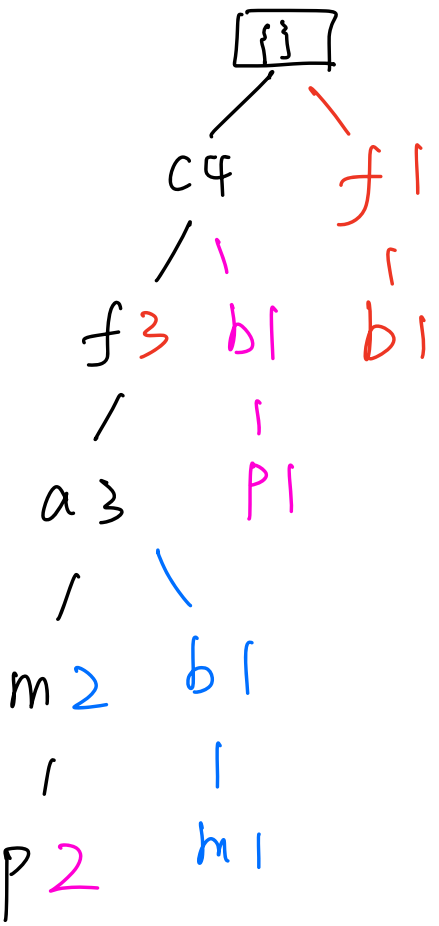
TID	f-list
100	c f a m p
200	c f a b m
300	f b
400	c b p
500	c f a m p

③ Construct FP-tree base on f-list

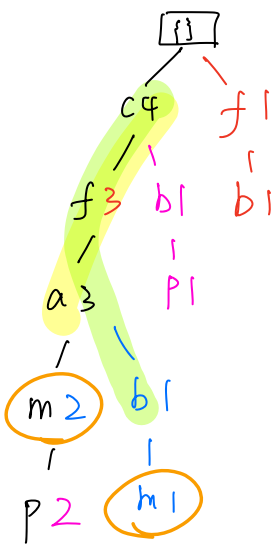








④ construct conditional FP-Tree : m



	sup
c f a	3
~~c f a b~~	~~1~~

So, c f a is condi. FP-Tree