5. (4 points)

Frequent items	Count
d	9
b	7
e	6
a	5
c	5

TID	Filtered ordered transactions
1	{d,b,e,a}
2	{d,b,c}
3	{d,b,e,a}
4	{d,e,a,c}
5	{d,b,e,c}
6	{d,b,e}
7	{d,c}
8	{b,a,c}
9	{d,e,a}
10	{d,b}
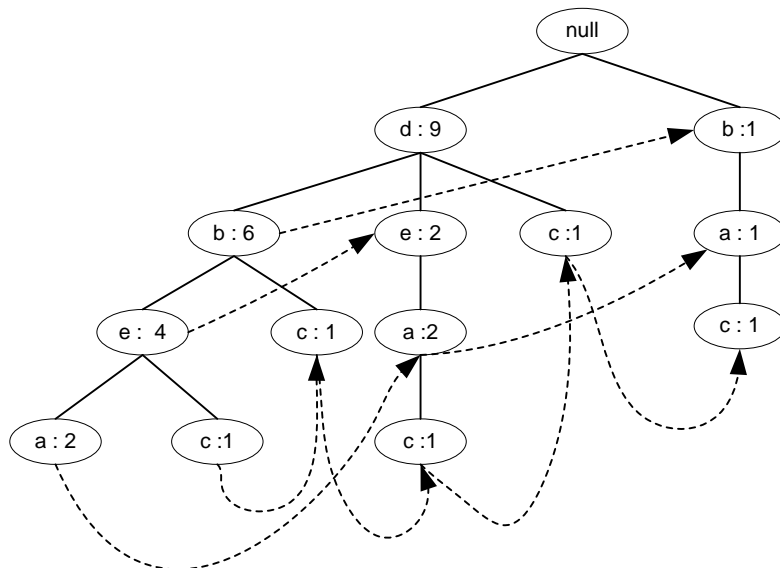
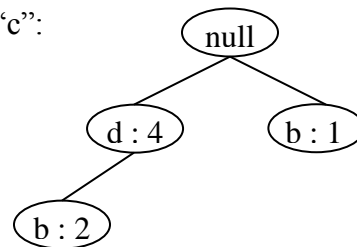**Suffix c:**   => Frequent itemset (FI) = {c}

Conditional pattern base for "c" i.e. the fragment of this tree containing transactions with c (without drawing c):

```
d , b , e    : 1
d , b        : 1
d ,     e , a : 1
d            : 1
    b ,    a : 1
```

Frequent items: Conditional FP-tree for "c":

d	4
b	3

Suffix bc: => Frequent itemset (FI) = {b,c}
Conditional pattern base for "bc", i.e. the fragment of this conditional tree containing transactions with b (without drawing b):
d : 2   infrequent

Suffix dc: => Frequent itemset (FI) = {d,c}
Conditional pattern base for "dc":
Nothing

FIs so far = {c} : 5 , {b,c} : 3 , {d,c} : 4

Suffix a: => Frequent itemset (FI) = {a}
TO DO

Suffix ba: => Frequent itemset (FI) = {b,a}
TO DO
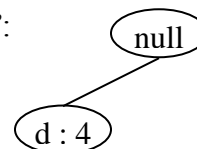
Suffix ea: => Frequent itemset (FI) = {e,a}
Conditional pattern base for "ea":
d : 4

Frequent items: Conditional FP-tree for "ea":

d	4

One path FP-tree. Frequent itemset (FI): {d,e,a}

Suffix da: => Frequent itemset (FI) = {d,a}
TO DO

Suffix e: => Frequent itemset (FI) = {e}
TO DO

Suffix b: => Frequent itemset (FI) = {b}
TO DO

Suffix d: => Frequent itemset (FI) = {d}
TO DO

All Frequent itemsets
{c} : 5 , {b,c} : 3 , {d,c} : 4
{a} : 5 , {b,a} : 3 , {e,a} : 4 , {d,e,a} : 4 , {d,a} : 4
{e} : 6 , {b,e} : 4 , {d,e} : 6 , {d,b,e} : 4
{b} : 7 , {d,b} : 6
{d} : 9