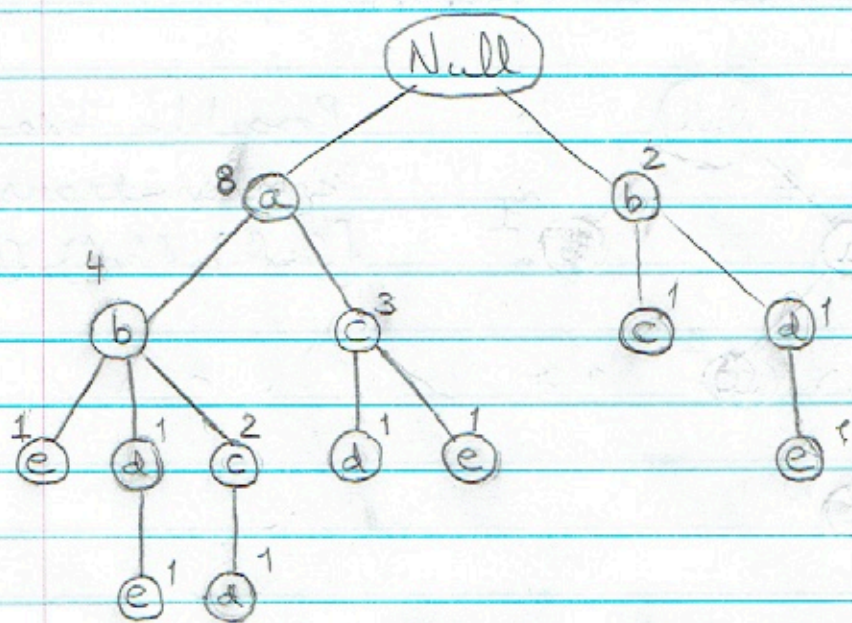
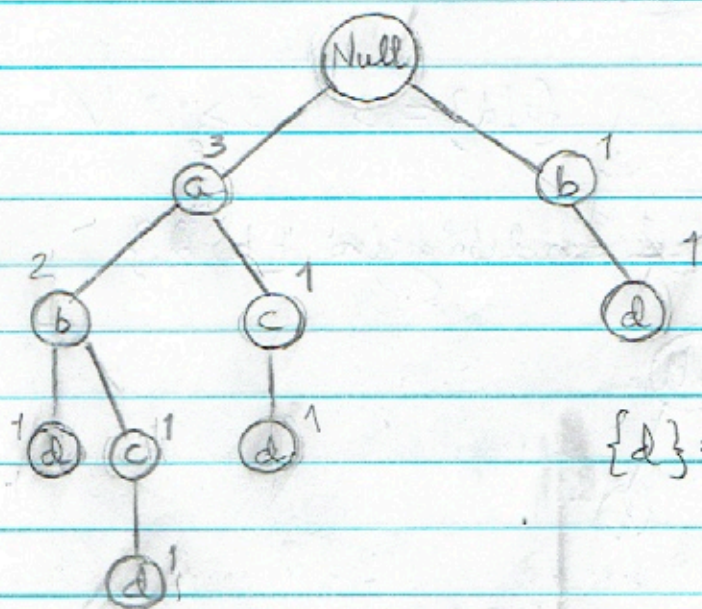


# Complete F.P. Tree



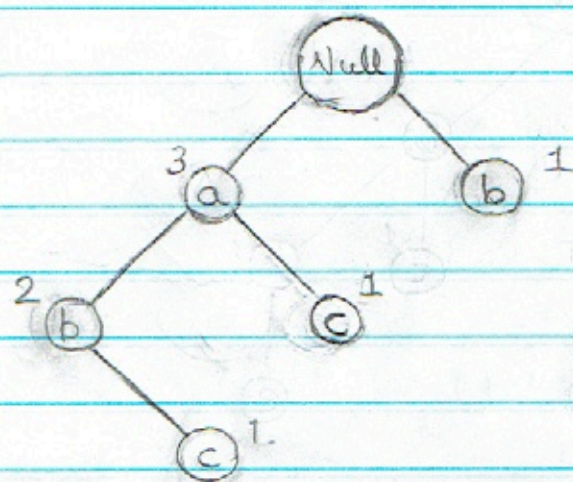
## Prefix Subtree for {d}



$$\{d\} = 3 \quad 3 \geq 2 \quad \checkmark$$

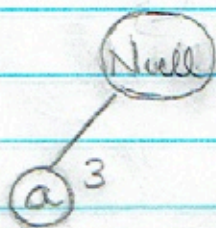


## Conditional Tree for $\{d\}$



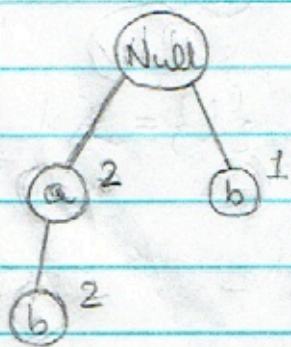
Possible two-set combinations,  
 $\{a, d\}, \{b, d\}, \{c, d\}$

Prefix tree ending in  $\{a, d\}$



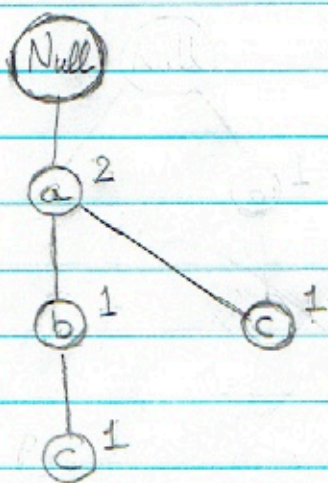
$$\{a, d\} = 3 \quad 3 \geq 2 \quad \checkmark$$

Prefix tree ending in  $\{b, d\}$



$$\{b, d\} = 3 \quad 3 \geq 2 \quad \checkmark$$

Prefix tree ending in  $\{c, d\}$

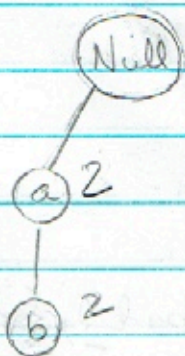


$$\{c, d\} = 2 \quad 2 \geq 2 \quad \checkmark$$

Possible three-set combinations

$[\{a, b, d\}, \{a, c, d\}, \{b, c, d\}]$

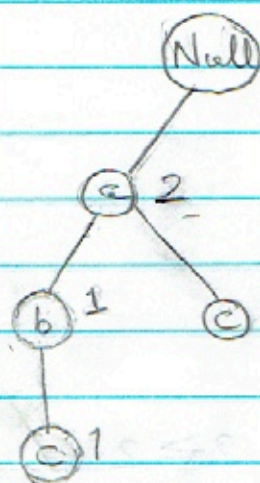
Prefix tree ending in  $\{a, b, d\}$



$$\{a, b, d\} = 2 \quad 2 \geq 2 \quad \checkmark$$



Prefix tree ending in  $\{a, c, d\}$

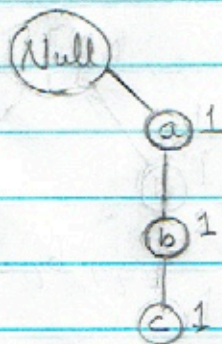


$$\{a, c, d\} = 2$$

$$2 \geq 2$$



Prefix tree ending in  $\{b, c, d\}$



$$\{b, c, d\} = 1$$

$$1 \neq 2$$

X

Frequent Patterns

$[\{d\}, \{a, d\}, \{b, d\}, \{c, d\}, \{a, b, d\}, \{a, c, d\}]$