symbol	Description
D	Database
δ	Minimum support value, δ = ceil (min_sup x $\|D\|$)
S_P	Support of a Pattern P
N_P	Projection nodes of a pattern P
H_P	Heuristic Support of a Pattern P
C	Count Attribute of Each Node
CETable	Co-Existing Item Table
sid	Sequence Identifier

(a)

item	$CETable_s$	$CETable_i$
a	a:3, b:2,c:5,d:4, e:3	b:7,c:5
b	a:5,b:3,c:6,d:4,e:3	c:4
c	a:7,b:4,c:5 d:3,e:2,f:1	d:4,e:2
d	a:6, b:3, c:4,e:3, f:1	e:2
e	a:5,b:2,c:2	f:1
f	a:2,b:1,c:2, d:1	

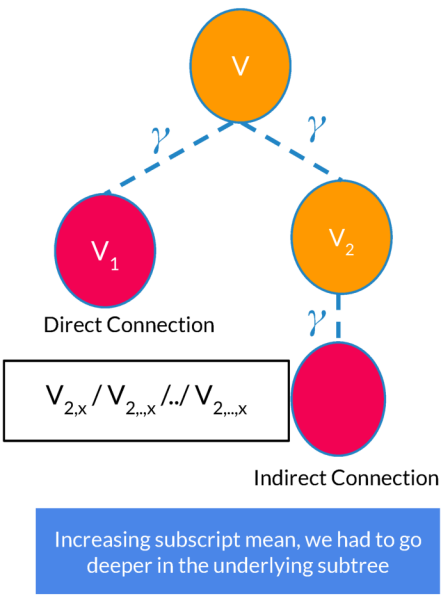
(b)

sid:1	<(f)(a)(b)(c)(d)>	<(abc)>

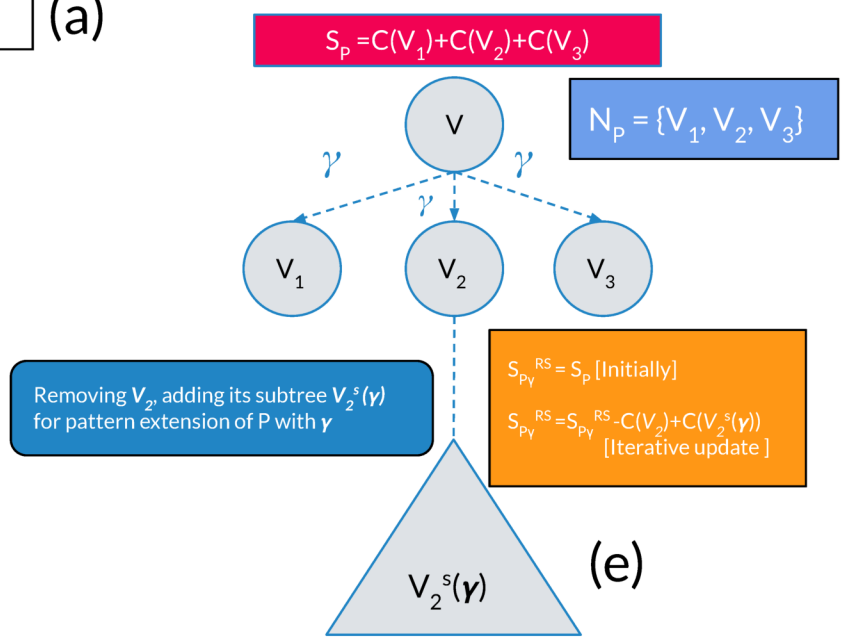
1	1	5	a: [2,2,2] b: [3,3,3] c: [4,4,4] d: [5,5,5] f: [1,1,1]	b: [0,0] c: [0,0]
	2	24	a: [2,2,6] b: [3,3,6] c: [4,4,6] d: [5,5,5] f: [1,1,1]	b: [0,1] c: [0,11]

(c)

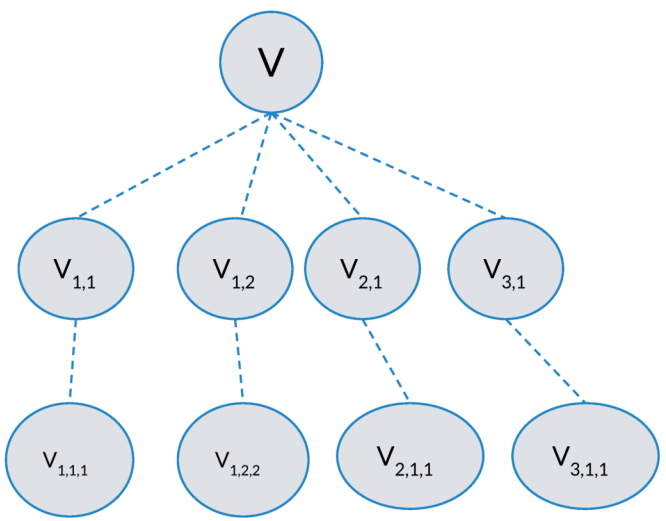
Iteration 1	Iteration 2
$S_c^{st} \not< S_a^{en_current}$ ~~(c)(a)~~	$S_c^{st} < S_a^{en_current}$ (c)(a)
c:0 ~~(ac),(bc)~~	c:11 (ac),(bc)



(d)



(e)



(f)