

LAB-8

(A) Generate the frequent pattern Tree from given dataset min_sup ≥ 3 .

(1)

TID

Items

Step - 1

1

EKMOY

2

OEKNOY

3

AEKM

4

CKMOY

5

CEIKO

item

Frequent

A

1

x

C

2

x

O

1

x

E

4

✓

I

1

x

{K:5, E:4, O:3, m:3, y:3}

K

5

✓

m

3

x

N

2

x

O

3

✓

U

1

x

Y

3

✓

Step - 2

TID

Sorted Items

1

K E m o y

2

K E O Y

3

K E m

4

K m y

5

K E O

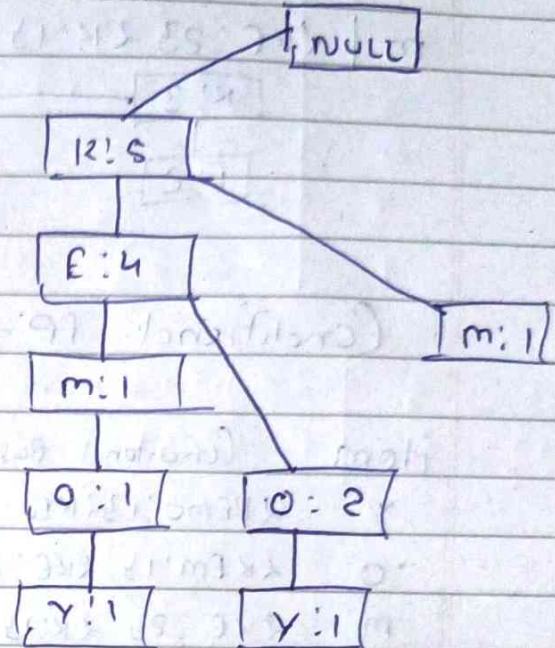
→ K E m o y

K E O y

K E m

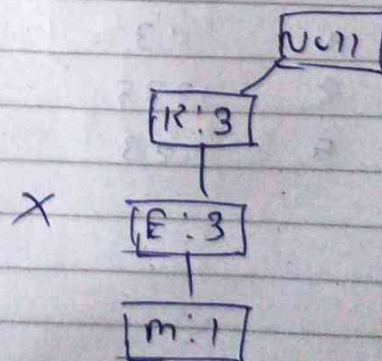
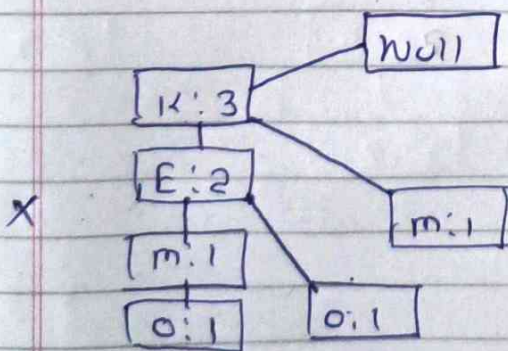
K m y

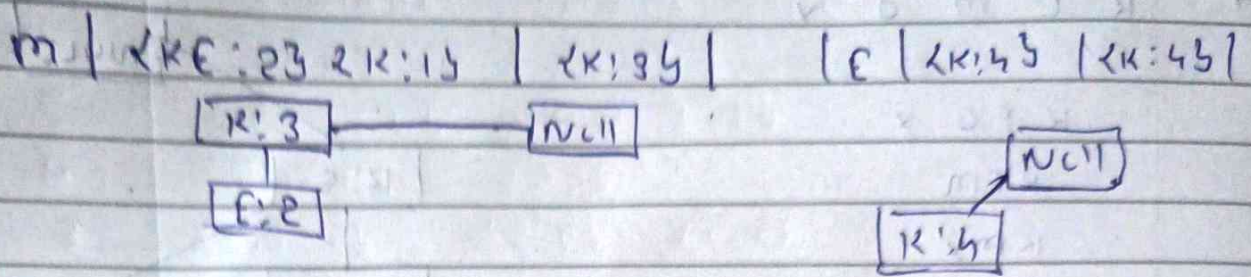
K E O



Item	Condition	Pattern	Base
y	$\{K E m o : 1\}$	$\{K E O : 1\}$	$\{K m : 1\}$
O	$\{K E m : 1\}$	$\{K E : 2\}$	
m	$\{K E : 2\}$	$\{K : 1\}$	
E	$\{K : 4\}$		
K			

y	$\{K E m o : 1\}$	$\{K E O : 1\}$	$\{K m : 1\}$	$\{K : 3\}$
O	$\{K E m : 1\}$	$\{K E : 1\}$	$\{K E : 2\}$	$\{K : 3\} \{E : 2\}$





Conditional FP-Tree and freq Pattern

item	Conditional Base Pattern	FP-Tree	freq - Pattern
Y	{K:E:13, R:E:13, K:m:13}	{K:35}	{K, Y:33}
O	{K:E:m:13, K:E:23}	{K:33, E:23}	{K, O:33, E, O:33}
M	{K:E:23, K:13}	{K:33}	{K, M:33}
E	{K:45}	{K:45}	{K, E:45}

(2)

TID Items

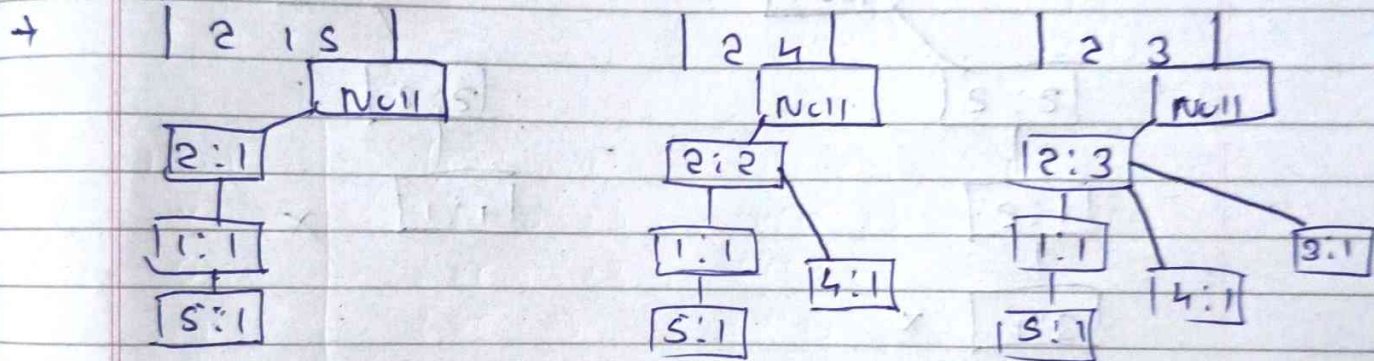
Step-1

1	125
2	24
3	23
4	124
5	13
6	23
7	13
8	1235
9	123

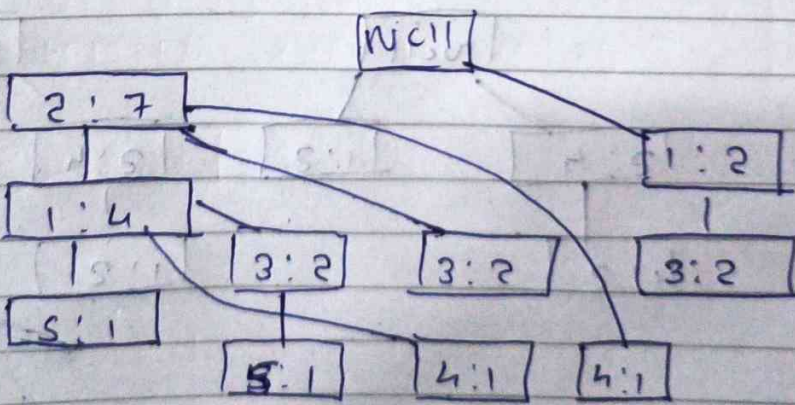
1	6
2	7
3	6
4	2
5	2

Step-2

TID	Items	
1	2 1 5	
2	2 4	
3	2 3	
4	2 1 4	
5	1 3	
6	2 3	
7	2 1 3	
8	2 1 3 5	
9	2 1 5	



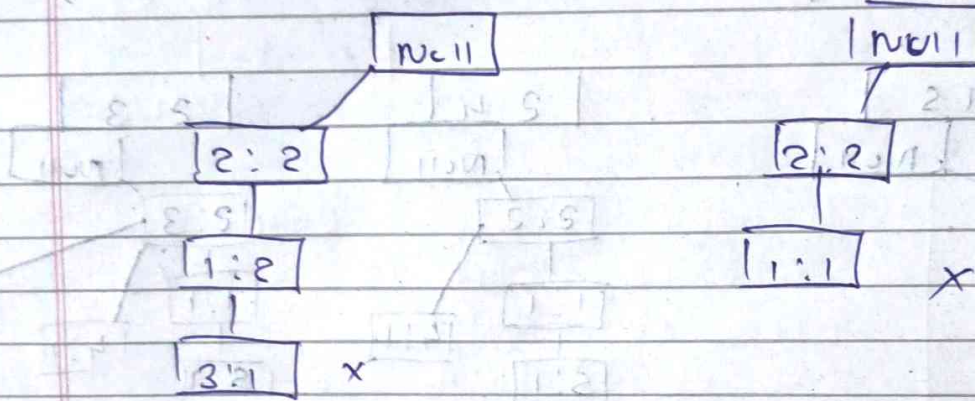
→ [2 | 1 | 4 | end all ...]



Conditional Pattern Base

5	$\langle 2, 1:1 \rangle$ $\langle 2, 1, 3:1 \rangle$
4	$\langle 2, 1:1 \rangle$ $\langle 2:1 \rangle$
3	$\langle 2, 1:2 \rangle$ $\langle 2:2 \rangle$ $\langle 1:2 \rangle$
1	$\langle 2:4 \rangle$

(1)	5	$\langle 2, 1:1 \rangle$ $\langle 2, 1, 3:1 \rangle$ $\langle 2:2 \rangle$ $\langle 1:2 \rangle$
(2)	4	$\langle 2, 1:1 \rangle$ $\langle 2:1 \rangle$ $\langle 2:2 \rangle$



(3)	3	$\langle 2, 1:2 \rangle$ $\langle 2:2 \rangle$ $\langle 1:2 \rangle$ $\langle 2:4 \rangle$ $\langle 1:3 \rangle$
(4)	1	$\langle 2:4 \rangle$ $\langle 2:7 \rangle$

