tid	itemset
t1	ACDEF
t2	ABCDE
t3	BCF
t4	ACDEF
t5	DB

minsup = 3

### step 1

sort items descending by support

item	support
С	4
D	4
А	3
В	3
E	3
F	3

# step 2

sort items in transaction in descending order of support

tid	itemset
t1	CDAEF
t2	CDABE

tid	itemset
t3	CBF
t4	CDAEF
t5	DB

## step 3

construct FP-tree (R) by adding each of the transactions this serves as an index in lieu of original db See fig. R in attachement.

### step 4

See respective figures in attachement.

#### R\_F

paths	count
CBF	1
CDAEF	2

#### R\_E

paths	count
CDAE	2
CDABE	1

#### R\_B

paths	count
DB	1

paths	count
CDAB	1
СВ	1

#### $R_A$

paths	count
CDA	3

#### R\_D

paths	count
D	1
CD	3

#### R\_C

paths	count
С	4

## step 5

Frequent patterns:

F:

{FC(3)}

E:

 $\{EC(3),ED(3),EA(3),ECD(3),ECA(3),EDA(3),ECDA(3)\}$ 

A:

{AC(3),AD(3),ACD(3)}

B:

{Ø}

D:

 $\{\emptyset\}$ 

C:

 $\{\emptyset\}$ 



