

Association Rule Mining

Apriori Algorithm



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Subject: Data Warehousing & Mining

Sem: V

Topic:

Find the frequent item sets in the following database of given transactions with min support 50% & confidence 50%.

200	A, B, C
100	A, C
400	A, D
500	B, E, F

Scan dataset for count of each candidate

Item	sup	
{A}	3	compare candidate support count with minimum support count 50%
{B}	2	
{C}	2	
{D}	1	
{E}	1	
{F}	1	

$L_1 =$

I	S
$\{A\}$	3
$\{B\}$	2
$\{C\}$	2

Generate candidate C_2 from L_1 ,

$C_2 =$

$\{A, B\}$
$\{A, C\}$
$\{B, C\}$

Scan D for count of each candidate C_i

I	S
$\{A, B\}$	1
$\{A, C\}$	2
$\{B, C\}$	1

pruning candidate list based on min Sup

$\{A, C\}$	2
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So, the association Rule that can be generated are

	S	C
$A \rightarrow C$	2	$2/3 = 0.66$ 66%
$C \rightarrow A$	2	$2/2 = 1$ 100%